

Survey of Road from Fifth
University Ave. to Old Town.

Page 1 to 7

Survey for Road from Third
Street to India and Kalmia

Page 8 to 10

Survey for Road from First
Wetherby to California
West. Page 11 to

F. B. 121
IND

Return to City Engineers Office

City Hall, San Diego, Cal.

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

| Degrees | DEGREES. | | ¼ DEGREE. | | ½ DEGREE. | | ¾ DEGREE. | | Degrees. |
|----------|----------|-------|-----------|-------|-----------|-------|-----------|-------|----------|
| | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | |
| 0 | | | 100.00 | 0.44 | 100.00 | 0.87 | 99.99 | 1.31 | 89 |
| 1 | 99.98 | 1.75 | 99.98 | 2.18 | 99.97 | 2.62 | 99.95 | 3.05 | 88 |
| 2 | 99.94 | 3.49 | 99.92 | 3.93 | 99.91 | 4.36 | 99.88 | 4.80 | 87 |
| 3 | 99.86 | 5.23 | 99.84 | 5.67 | 99.81 | 6.10 | 99.79 | 6.54 | 86 |
| 4 | 99.76 | 6.98 | 99.73 | 7.41 | 99.69 | 7.85 | 99.66 | 8.28 | 85 |
| 5 | 99.62 | 8.72 | 99.58 | 9.15 | 99.54 | 9.58 | 99.50 | 10.02 | 84 |
| 6 | 99.45 | 10.45 | 99.41 | 10.89 | 99.36 | 11.32 | 99.31 | 11.75 | 83 |
| 7 | 99.25 | 12.19 | 99.20 | 12.62 | 99.14 | 13.05 | 99.09 | 13.49 | 82 |
| 8 | 99.03 | 13.92 | 98.97 | 14.35 | 98.90 | 14.78 | 98.84 | 15.21 | 81 |
| 9 | 98.77 | 15.64 | 98.70 | 16.07 | 98.63 | 16.50 | 98.56 | 16.93 | 80 |
| 10 | 98.48 | 17.36 | 98.40 | 17.79 | 98.33 | 18.22 | 98.25 | 18.65 | 79 |
| 11 | 98.16 | 19.08 | 98.08 | 19.51 | 97.99 | 19.94 | 97.90 | 20.36 | 78 |
| 12 | 97.81 | 20.79 | 97.72 | 21.22 | 97.63 | 21.64 | 97.53 | 22.07 | 77 |
| 13 | 97.44 | 22.50 | 97.34 | 22.92 | 97.24 | 23.34 | 97.13 | 23.77 | 76 |
| 14 | 97.03 | 24.19 | 96.92 | 24.62 | 96.81 | 25.04 | 96.70 | 25.46 | 75 |
| 15 | 96.59 | 25.88 | 96.48 | 26.30 | 96.36 | 26.72 | 96.25 | 27.14 | 74 |
| 16 | 96.13 | 27.56 | 96.00 | 27.98 | 95.88 | 28.40 | 95.76 | 28.82 | 73 |
| 17 | 95.63 | 29.24 | 95.50 | 29.65 | 95.37 | 30.07 | 95.24 | 30.49 | 72 |
| 18 | 95.11 | 30.90 | 94.97 | 31.32 | 94.83 | 31.73 | 94.69 | 32.14 | 71 |
| 19 | 94.55 | 32.56 | 94.41 | 32.97 | 94.26 | 33.38 | 94.12 | 33.79 | 70 |
| 20 | 93.97 | 34.20 | 93.82 | 34.61 | 93.67 | 35.02 | 93.51 | 35.43 | 69 |
| 21 | 93.36 | 35.84 | 93.20 | 36.24 | 93.04 | 36.65 | 92.88 | 37.06 | 68 |
| 22 | 92.72 | 37.46 | 92.55 | 37.86 | 92.39 | 38.27 | 92.22 | 38.67 | 67 |
| 23 | 92.05 | 39.07 | 91.88 | 39.47 | 91.71 | 39.87 | 91.53 | 40.27 | 66 |
| 24 | 91.35 | 40.67 | 91.18 | 41.07 | 91.00 | 41.47 | 90.81 | 41.87 | 65 |
| 25 | 90.63 | 42.26 | 90.45 | 42.66 | 90.26 | 43.05 | 90.07 | 43.44 | 64 |
| 26 | 89.88 | 43.84 | 89.69 | 44.23 | 89.49 | 44.62 | 89.30 | 45.01 | 63 |
| 27 | 89.10 | 45.40 | 88.90 | 45.79 | 88.70 | 46.17 | 88.50 | 46.56 | 62 |
| 28 | 88.29 | 46.95 | 88.09 | 47.33 | 87.88 | 47.72 | 87.67 | 48.10 | 61 |
| 29 | 87.46 | 48.48 | 87.25 | 48.86 | 87.04 | 49.24 | 86.82 | 49.62 | 60 |
| 30 | 86.60 | 50.00 | 86.38 | 50.38 | 86.16 | 50.75 | 85.94 | 51.13 | 59 |
| 31 | 85.72 | 51.60 | 85.49 | 51.88 | 85.26 | 52.25 | 85.04 | 52.62 | 58 |
| 32 | 84.80 | 52.99 | 84.57 | 53.36 | 84.34 | 53.73 | 84.10 | 54.10 | 57 |
| 33 | 83.87 | 54.46 | 83.63 | 54.83 | 83.39 | 55.19 | 83.15 | 55.56 | 56 |
| 34 | 82.90 | 55.92 | 82.66 | 56.28 | 82.41 | 56.64 | 82.16 | 57.00 | 55 |
| 35 | 81.92 | 57.36 | 81.66 | 57.71 | 81.41 | 58.07 | 81.16 | 58.42 | 54 |
| 36 | 80.90 | 58.78 | 80.64 | 59.13 | 80.39 | 59.48 | 80.13 | 59.83 | 53 |
| 37 | 79.86 | 60.48 | 79.60 | 60.53 | 79.34 | 60.88 | 79.07 | 61.22 | 52 |
| 38 | 78.80 | 61.57 | 78.53 | 61.91 | 78.26 | 62.25 | 77.99 | 62.59 | 51 |
| 39 | 77.71 | 62.93 | 77.44 | 63.27 | 77.16 | 63.61 | 76.88 | 63.94 | 50 |
| 40 | 76.60 | 64.28 | 76.32 | 64.61 | 76.04 | 64.94 | 75.76 | 65.28 | 49 |
| 41 | 75.47 | 65.61 | 75.18 | 65.93 | 74.90 | 66.26 | 74.61 | 66.59 | 48 |
| 42 | 74.31 | 66.91 | 74.02 | 67.34 | 73.73 | 67.56 | 73.43 | 67.88 | 47 |
| 43 | 73.14 | 68.20 | 72.84 | 68.52 | 72.54 | 68.84 | 72.24 | 69.15 | 46 |
| 44 | 71.93 | 69.47 | 71.63 | 69.78 | 71.33 | 70.09 | 71.02 | 70.40 | 45 |
| 45 | 70.71 | 70.71 | | | | | | | |
| Degrees. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Degrees. |
| | DEGREES. | | ¼ DEGREE. | | ½ DEGREE. | | ¾ DEGREE. | | |

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Return to City Engineers Office
City Hall, San Diego, Cal.

121

Survey of Road fr. Univ Ave ^{9th} 3rd St
to New County Hospital 35-36

Levels on " " " 38, 42

Survey of Road on Old Town Dyke 43, 49

Levels on " " " " 53-70 73-78

* Sections of Hawthorn St. fr. 5 to Park 71-72

County Poor House Wagon Road 79

1

Road from 5thth of University to Old Town
Page 1 to 7

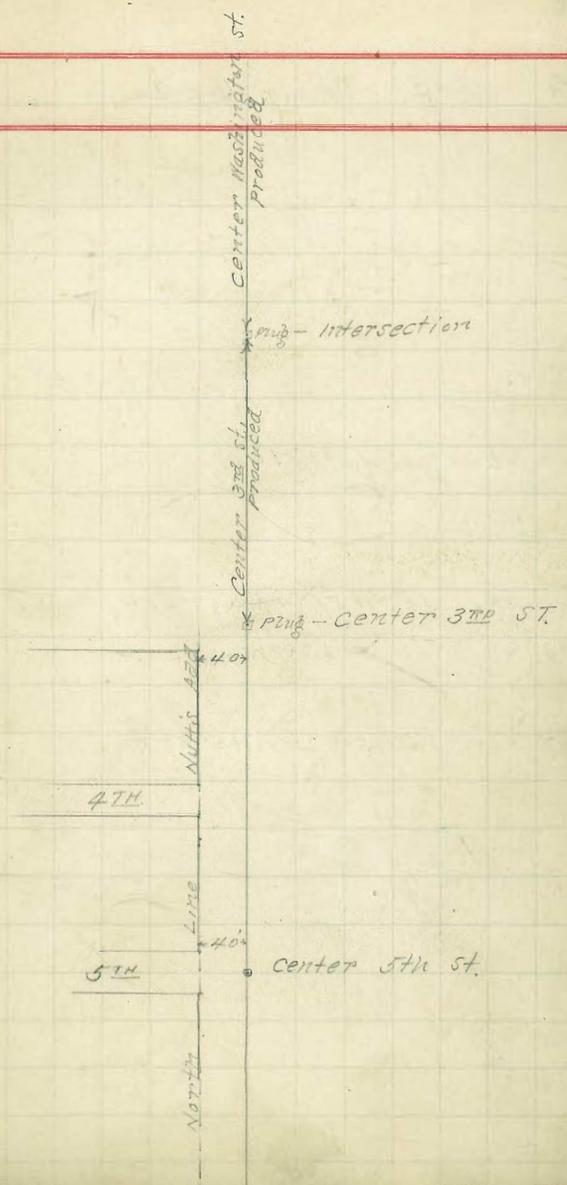
11/12/01.

Samuel
William
Kear

Survey of Road from 5th and University, to Old Town

① 1

| No. | Ang | Bearing | Mag. Dist. |
|-----|--------|-------------------------|---------------------------------------|
| 16 | | | |
| 15 | | | |
| 14 | | | |
| 13 | +27.2 | $\angle 89^{\circ} 55'$ | $N 89^{\circ} 55' W 57^{\circ} 15' W$ |
| 12 | | | |
| 11 | | | |
| 10 | 6'-2.2 | | |
| 9 | | | |
| 8 | | | |
| 7 | +15 | $\angle 89^{\circ} 58'$ | North $N 14^{\circ} 40' W$ |
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |
| 0 | | | $N 89^{\circ} 56' W 57^{\circ} 15' W$ |



| Sta. | Ang. | Bearing | Mag. Len. |
|------|------|---------|-----------|
|------|------|---------|-----------|

| | | | |
|----|-------|----------------------------------|--|
| 37 | | | |
| 36 | | | |
| 35 | | | |
| 34 | | | |
| 33 | +26.5 | | |
| 32 | | | |
| 31 | +79 | L 38° 06' N 89° 55' W 575° 10' W | |
| 30 | | | |
| 29 | | | |
| 28 | +75 | R 45° 34' N 51° 49' W 66° 45' W | |
| 27 | +73 | R 64° 56' S 82° 37' W 867° 40' W | |
| 26 | | | |
| 25 | +90 | L 72° 24' S 17° 41' W 82° 50' W | |
| 24 | | | |
| 23 | | | |
| 22 | | | |
| 21 | | | |
| 20 | | | |
| 19 | | | |
| 18 | | | |
| 17 | | | |

180
 172
 162
 152
 142
 132
 122
 112
 102
 92
 82
 72
 62
 52
 42
 32
 22
 12
 2
 1

Eagle

St.

Dove

 Ring - Center
 Washington St.
 Dove St.

 Ring -
 Center - Washington St.
 East Boundary St.
 Arnold and Choate's Add.

Spikes

Ring

Ring

Ring

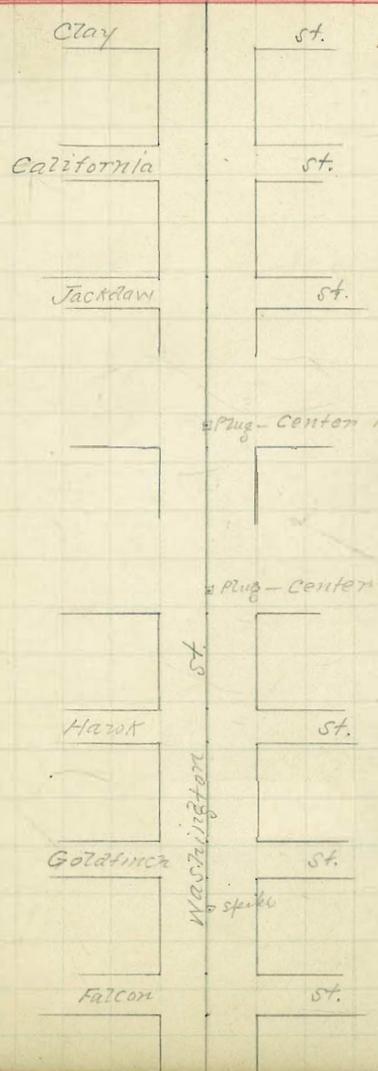
Sta. Ang. Bearing Mag. Bear.

| | | | | |
|----|-------|------------|-------------|-----------------------------------|
| 58 | | | | |
| 57 | | | | |
| 56 | | | | |
| 55 | | | | |
| 54 | | | | |
| 53 | | | | |
| 52 | | | | |
| 51 | | | | |
| 50 | +77.2 | 0L 90° 01' | N 89° 56' W | S 74° 10' W <i>then pipe line</i> |
| 49 | | | | |
| 48 | | | | |
| 47 | +27.6 | OR 90° 0' | N 0° 05' E | N 15° 0' W |
| 46 | | | | |
| 45 | | | | |
| 44 | | | | |
| 43 | | | | |
| 42 | | | | |
| 41 | | | | |
| 40 | +64 | | | |
| 39 | | | | |
| 38 | | | | |

809.6

359.6

1548.6



WASTING STATION

Plug - Center 1815 by Getti

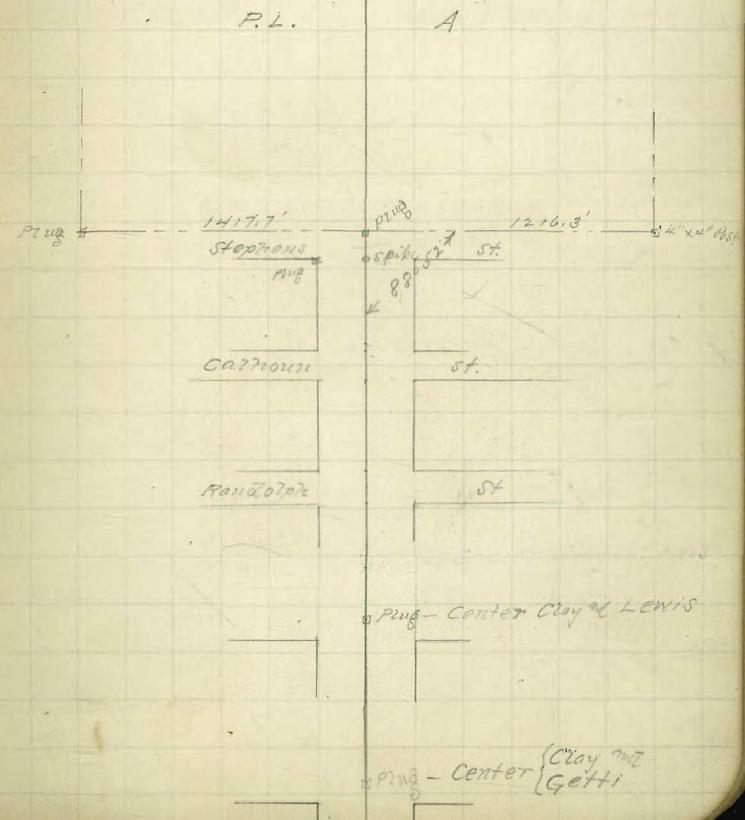
Plug - Center 1815.

11/10/01

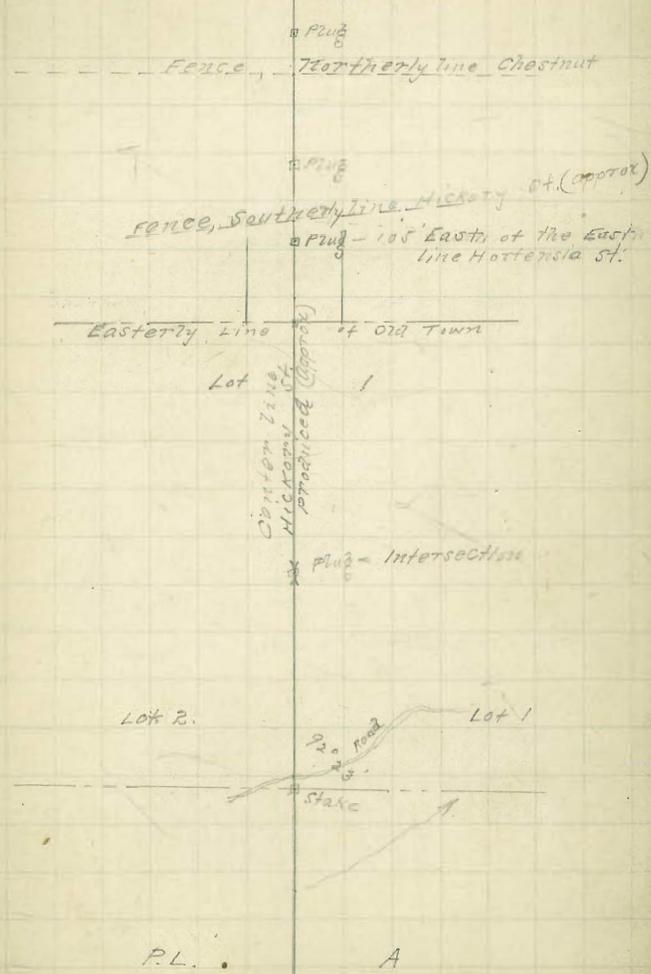
(4) 4

| Sta. | Ang. | Bearing | Mag. Pa. |
|------|------|---------|----------|
|------|------|---------|----------|

| | | | |
|-------|-------------------|-------------|---------------|
| 79 | | | |
| 78 | | | |
| 77 | | | |
| 76 | 109° 1' | | |
| 75 | | | |
| 74 | | | |
| 73 | | | |
| 72 | | | |
| 71 | | | |
| 70+27 | +71.7 OR 15° 24' | N 74° 34' W | 89° 50' N |
| 69 | | | |
| 68 | | | |
| 67 | | | |
| 66 | 80° 2' | | |
| 65 | | | |
| 64 | | | |
| 63 | | | |
| 62 | +47.7 OR 90° 07' | N 89° 55' W | 87° 40' 50" N |
| 61 | | | |
| 60 | | | |
| 59 | +168.0 OR 90° 05' | N 0° 09' E | N 15° 0' W |



| Sta. | Ang. | Bearing | Mag. Bear. |
|------|---------|---------|-------------------------|
| 100 | +66.0R | 19° 50' | S 62° 38' W S 47° 25' W |
| 99 | +67.8 | | |
| 98 | +60.0L | 27° 22' | S 42° 48' W S 27° 30' W |
| 97 | +50.0L | | |
| 96 | +20.0L | 56° 47' | S 70° 10' W S 54° 55' W |
| 95 | | | |
| 94 | +50.0 | | |
| 93 | | | |
| 92 | | | |
| 91 | | | |
| 90 | | | |
| 89 | +28.0R | 36° 31' | N 53° 03' W N 68° 10' W |
| 88 | | | |
| 87 | | | |
| 86 | | | |
| 85 | | | |
| 84 | +69.80L | 15° 00' | N 89° 34' W S 75° 15' W |
| 83 | | | |
| 82 | | | |
| 81 | | | |
| 80 | | | |



11/16/61

(6) 6

Sta. Cont. Bearing Mag. Rem.

| Sta. | Cont. | Bearing | Mag. Rem. |
|------|-------|--------------------------|---|
| 121 | 211 | | |
| 120 | +35 | | |
| | +98 | $\Delta 10^{\circ} 26'$ | $N 60^{\circ} 39' W N 75^{\circ} 50' W$ |
| 119 | | | |
| 118 | 341 | | |
| 117 | | | |
| 116 | +57 | $\circ R 21^{\circ} 43'$ | $N 50^{\circ} 13' W N 65^{\circ} 25' W$ |
| 115 | 390 | | |
| 114 | | | |
| | +62 | $\Delta 24^{\circ} 36'$ | $N 71^{\circ} 56' W N 87^{\circ} 10' W$ |
| 113 | | | |
| 112 | 294 | | |
| 111 | | | |
| | +68 | $\circ R 15^{\circ} 41'$ | $N 47^{\circ} 20' W N 62^{\circ} 30' W$ |
| 110 | | | |
| 109 | 203 | | |
| | +65 | $\circ R 34^{\circ} 0'$ | $N 63^{\circ} 0' W N 78^{\circ} 15' W$ |
| 108 | | | |
| 107 | 198 | | |
| | +67 | $\circ R 12^{\circ} 42'$ | $S 82^{\circ} 59' W S 67^{\circ} 45' W$ |
| 106 | | | |
| 105 | 264 | | |
| | +103 | $\circ R 37^{\circ} 0'$ | $S 70^{\circ} 17' W S 55^{\circ} 0' W$ |
| 103 | 212 | | |
| 102 | | | |
| | +91 | $\Delta 29^{\circ} 21'$ | $S 33^{\circ} 17' W S 18^{\circ} 0' W$ |
| 101 | 125 | | |

P107

P108

P109

P110

P111

P112

P113

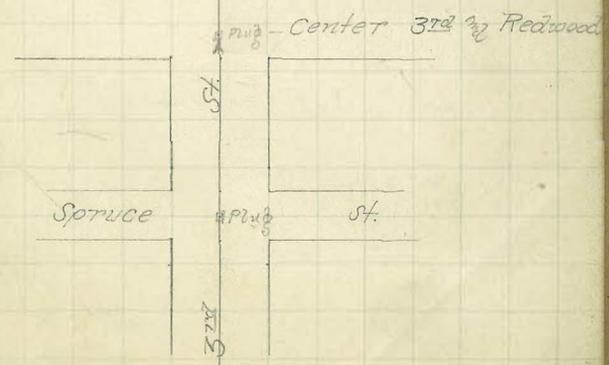
P114

11/19/01
 (Chimney
 Williams)
 Ken

Survey for Road, from
 3rd and Spruce to India and Kalmia

| Sta. | ang. | Bearing | Mag. Rem. |
|------|------|-------------------------|---|
| 16 | +17 | $\phi L 29^{\circ} 57'$ | $S 49^{\circ} 15' W$ $S 34^{\circ} 20' W$ |
| 15 | | | |
| 14 | +18 | $\phi R 31^{\circ} 00'$ | $S 79^{\circ} 12' W$ $S 64^{\circ} 15' W$ |
| 13 | | | |
| 12 | +97 | $\phi L 7^{\circ} 25'$ | $S 48^{\circ} 12' W$ $S 33^{\circ} 10' W$ |
| 11 | | | |
| 10 | +82 | $\phi R 16^{\circ} 42'$ | $S 55^{\circ} 37' W$ $S 40^{\circ} 45' W$ |
| 9 | +68 | $\phi L 46^{\circ} 55'$ | $S 38^{\circ} 55' W$ $S 24^{\circ} 00' W$ |
| 8 | +77 | $\phi R 50^{\circ} 32'$ | $S 85^{\circ} 50' W$ $S 71^{\circ} 00' W$ |
| 7 | +13 | $\phi R 18^{\circ} 11'$ | $S 35^{\circ} 18' W$ $S 20^{\circ} 30' W$ |
| 6 | +42 | $\phi R 14^{\circ} 42'$ | $S 17^{\circ} 07' W$ $S 2^{\circ} 15' W$ |
| 5 | | | |
| 4 | +26 | $\phi R 6^{\circ} 17'$ | $S 2^{\circ} 25' W$ $S 12^{\circ} 30' E$ |
| 3 | | | |
| 2 | +80 | $\phi L 3^{\circ} 52'$ | $S 3^{\circ} 52' E$ $S 18^{\circ} 40' E$ |
| 1 | | | |
| 0 | | SOUTH | $S 14^{\circ} 50' E$ |

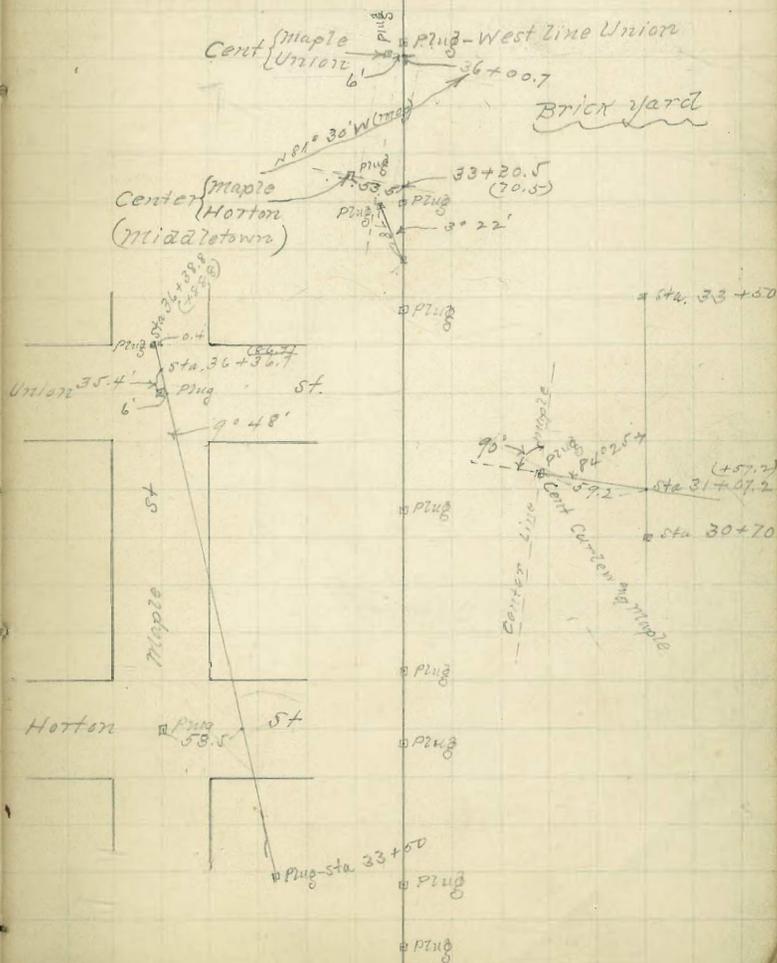
Note (An error was made
 in numbering the stakes,
 add 50 to sta. 7+42
 and every station thereafter)



11/20/51

(9)
9

| Sta. | Ang. | Reading | Mag. Bear |
|------|-----------------------------|-------------|-------------------------|
| 37 | | | |
| 36 | (+86.6) L 46° 17' | S 14° 18' W | S 0° 50' E |
| 35 | (35+29) | | |
| 34 | (+70.5) (+20.5) (+50) | L 23° 58' | S 60° 30' W S 45° 30' W |
| 32 | (32+25) | | |
| 31 | (31+20) (+70) | R 28° 07' | S 84° 33' W S 69° 30' W |
| 30 | | | |
| 29 | | | |
| 28 | | | |
| 27 | (37+08) (+59) | R 17° 27' | S 56° 26' W S 41° 25' W |
| 26 | | | |
| 25 | | | |
| 24 | (+68) (+18) | R 33° 11' | S 38° 59' W S 24° 0' W |
| 22 | (32+17) (+67) | L 30° 25' | S 5° 48' W S 9° 10' E |
| 21 | | | |
| 20 | | | |
| 19 | (+20) (+70) | L 50° 02' | S 36° 13' W S 21° 15' W |
| 18 | | | |
| 17 | (+44) (+34) | R 37° 00' | S 86° 15' W S 71° 20' W |



Sta. *Orig.* Bearing *Mag. Res.*

(+394)
48 + 19.4

47

46

(94.4)
45 + 44.10 R 56° 04' S 70° 22' W S 55° 10' W

44

43 + 41

42

41

(111 + 13)
40 + 63

39

38

India

St.

Kalmia

plug - Cent. Columbia Mt.
Kalmia

spike

Center

Cent. State Mt. Laurel

33° 57'

plug

27.8

Tile State

11/22/61

Survey
William
Kerr
Daley

Survey for Road, from First

and Witherby, to California and Noell

(11)
11

Sta. 0 ang 5

16 +05
+89 L 90° 00'

15

14

13

12

11

10

9

8

7

6

5 +185 R 10° 43'

4

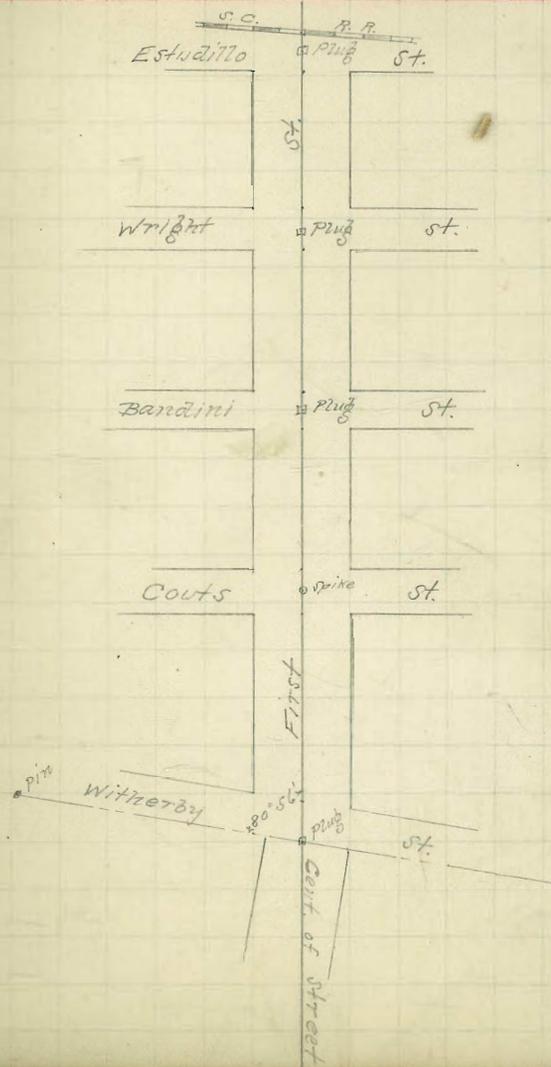
3

2

1

0

1140.5



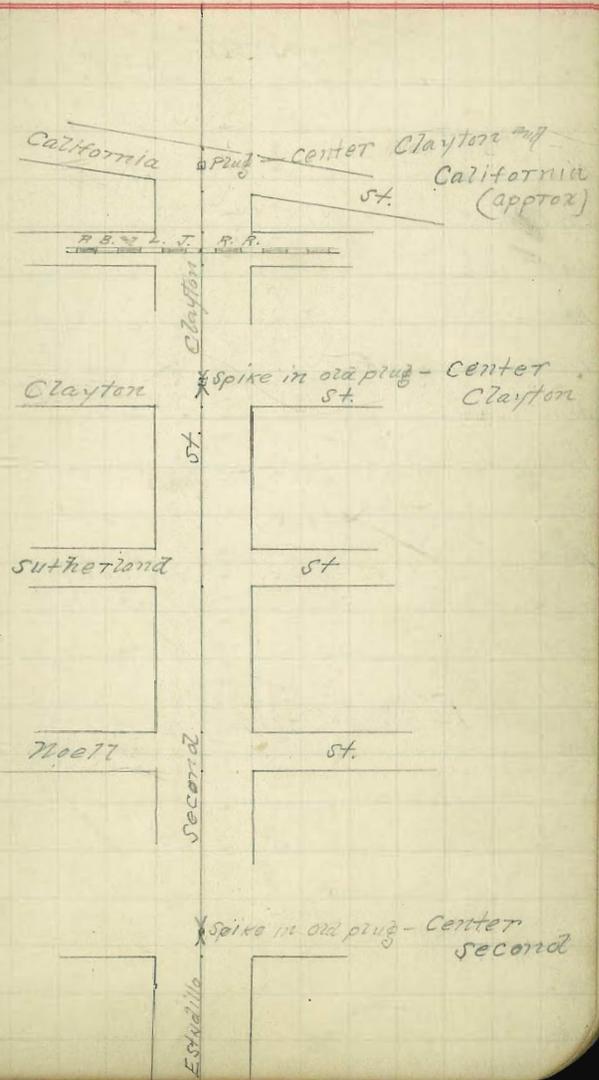
Sta. and

35 + 10.5a
 34
 33 + 48.6
 32
 31
 30 + 74.8° L 90° 01'
 29
 28
 27
 26
 25
 24
 23
 22
 21
 20
 19 + 33.5° R 90° 01'
 18
 17

1480.7

1141.3

274.5



19/2/02

Survey
Run
Down

Survey of Mission Valley
the City Limits

Road, from Old Town to 13

Sta. Ang. Bearing Mag. Run.

17 +79 618°30' 584°31'E N 88°35'E

16 307

14 +82 0R 12°06' 576°01'E N 88°50'E

13

12

11 87

10

9 +80 0R 60°47' 588°07'E N 76°50'E

8 205

7 +75 0L 18°34' N 23°06'E N 8°00'E

6

5

4

3 +50 0R 90° N 36°40'E N 21°35'E

2

1

0

Relocated from the
of Taylor and Hickory,
39+65
see page 24



CR 1000
No. 8
Pump Plant

Spire

Flag

Cent Taylor and S. West
line of Hickory

Flag - Cent. Taylor and Chestnut

Jackson St

Chestnut
N 30° 20' W (approx)

20/2/62

Mission Valley

Road

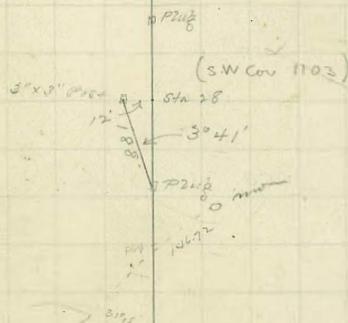
14

| St. | Ang. | Bearing | Mag. Bear. |
|---------|-----------|-------------|-------------|
| 38 | | | |
| 37 | | | |
| 36 + 15 | 0110° 01' | N 81° 47' E | N 66° 30' E |
| 35 | | | |
| 34 | | | |
| 33 | | | |
| 32 | | | |
| 31 | | | |
| 30 | | | |
| 29 + 63 | 0125° 18' | S 88° 13' E | N 76° 30' E |
| 28 | | | |
| 27 | | | |
| 26 + 12 | 0121° 37' | S 82° 54' E | S 78° 10' E |
| 25 | | | |
| 24 | | | |
| 23 | | | |
| 22 | | | |
| 21 | | | |
| 20 | | | |
| 19 | | | |
| 18 | | | |

Located

2512
1719
833

NEGOTIATION
252228



Mission Valley Road

No. Ang. Bearing Mag. Bear.

| | | | |
|----|-----------|---------------------------|---------------------------------------|
| 59 | 503 | | |
| 58 | | | |
| 57 | L 18° 14' | N 56° ¹³ 00' E | N 40° 55' E |
| 56 | | | |
| 55 | 445 | | |
| 54 | | | |
| 53 | | | |
| 52 | + 55 | L 36° 44' | N 74° ²⁷ 30' E N 59° 10' E |
| 51 | 163 | | |
| 50 | + 92 | L 36° 11' | S 68° 46' E S 84° 10' E |
| 49 | 547 | | |
| 48 | | | |
| 47 | + 45 | R 52° 04' | S 32° 35' E S 47° 55' E |
| 46 | | | |
| 45 | | | |
| 44 | | | |
| 43 | 780 | | |
| 42 | | | |
| 41 | | | |
| 40 | | | |
| 39 | + 65 | R 13° 34' | S 84° 39' E N 80° 0' E |
| 38 | 350 | | |

continued from page 25



21/2/02 Mission Valley Road

16

Sta. Orig. Bearing. Mag. Bear.

| | | | |
|--------|-----------|-----------------------|-------------|
| P0 | | | |
| 79 +78 | R 24° 21' | N 75° ³⁰ E | N 60° 10' E |
| +78 | | | |
| 78 | L 27° 18' | N 51° ⁰⁹ E | N 35° 50' E |
| +77 | | | |
| 76 | | | |
| 75 | L 12° 59' | N 78° ²⁷ E | N 63° 10' E |
| +74 | | | |
| 73 | | | |
| 72 | | | |
| 71 | | | |
| 70 | | | |
| 69 | | | |
| 68 | | | |
| 67 | | | |
| 66 +43 | L 23° 16' | S 88° ³⁴ E | N 75° 50' E |
| 65 | | | |
| 64 | | | |
| 63 | | | |
| 62 +03 | R 58° 29' | S 65° ¹⁸ E | S 80° 40' E |
| 61 | | | |
| 60 | | | |

Fence

Cor.

Fence

Cor. fence

4 P 11 2

4 P 11 2

Mission Valley Road

17

Sta. ang. Bearing Mag. Bear.

101
100
99
98
97
96
95
94
93
92
91
90
89
88
87
86
85
84
83
82
81

3441

460

16'

16'

Mission Valley Road

(19)
19

Sta. Ang. Bearing Mag. Bear

143 +12 0L21°01' N54¹⁶(9)E N39°25E

142

141

140

139

138

137

136

135

134

2828

133

132

131

130

+83

129

128

127

126

125

124

+28

1107

Fence

504

1106

140407

25 25

Fence

Fence

Fence

50

Pony Road

25 25

22/2/02

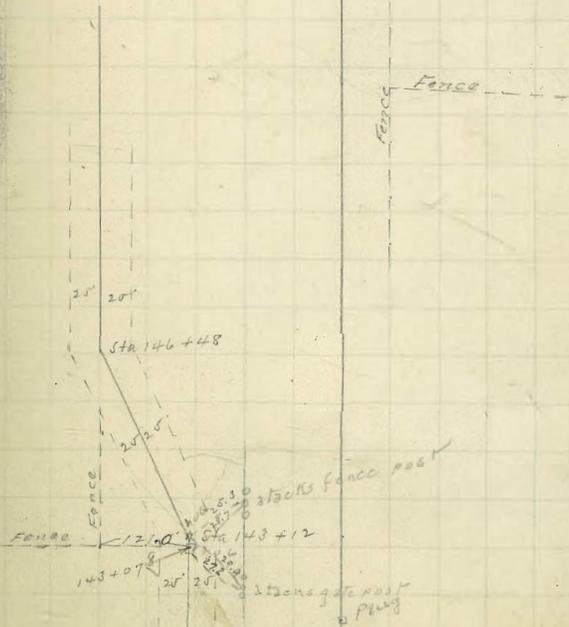
Mission Valley Road

(2) 20

St. Ang. Bearing Mag. Rem.

- 164
- 163
- 162
- 161
- 160
- 159
- 158
- 157 +47
- 156
- 155
- 154
- 153
- 152
- 151
- 150
- 149
- 148
- 147
- 146 +48
- 145
- 144

OR 20° 55' N 75° 14' E N 50° 15' E



Mission Valley Road

22

| Sta. | Ang. | Bearing | Mag. Bear. |
|------|------|---------|------------|
|------|------|---------|------------|

| | | | |
|----------|----------|-------------|-------------|
| 206 | | | |
| 205 | | | |
| 204 | 198 | | |
| 203 | | | |
| 202 | | | |
| 201 + 15 | 125° 34' | N 74° 09' E | N 59° 06' E |

| | | | |
|-----|-----|--|-------------|
| 200 | | | |
| 199 | | | |
| 198 | 559 | | |
| 197 | | | |
| 196 | 479 | | |
| 195 | 19 | 0 R 24° 45' S 80° 11' E | N 82° 05' E |
| 194 | | continued from page 21 with Book 370 A | |

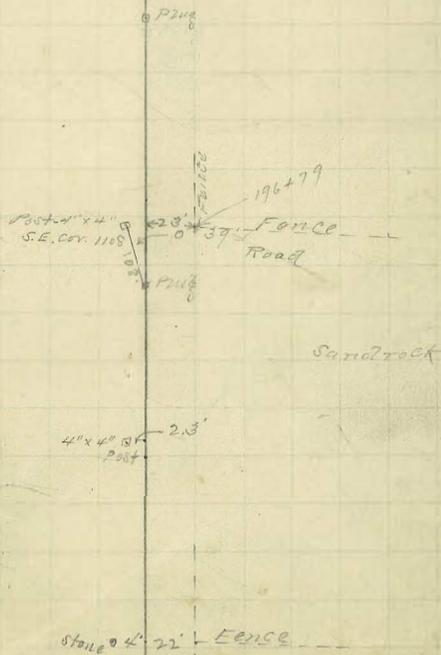
193 + 36

191
190
189

188 + 05

187

186



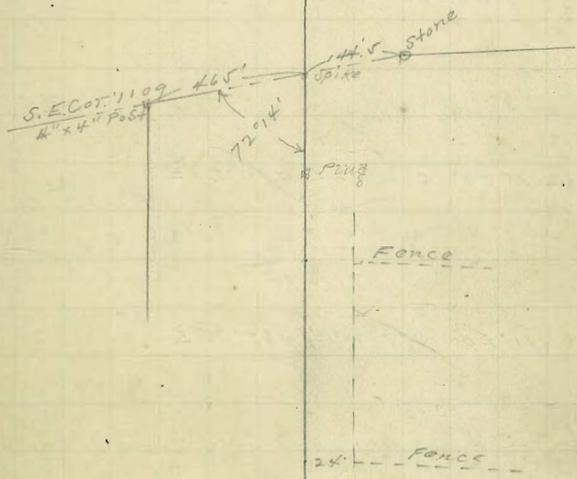
Mission Valley Road

(23)
23

Sta. Ang. Bearing W. of P. from

222
221
220
219
218
217
216
215
214
213
212
211
210
209
208
207

43
R 7° 34' N 81° 49' N 66° 30' E



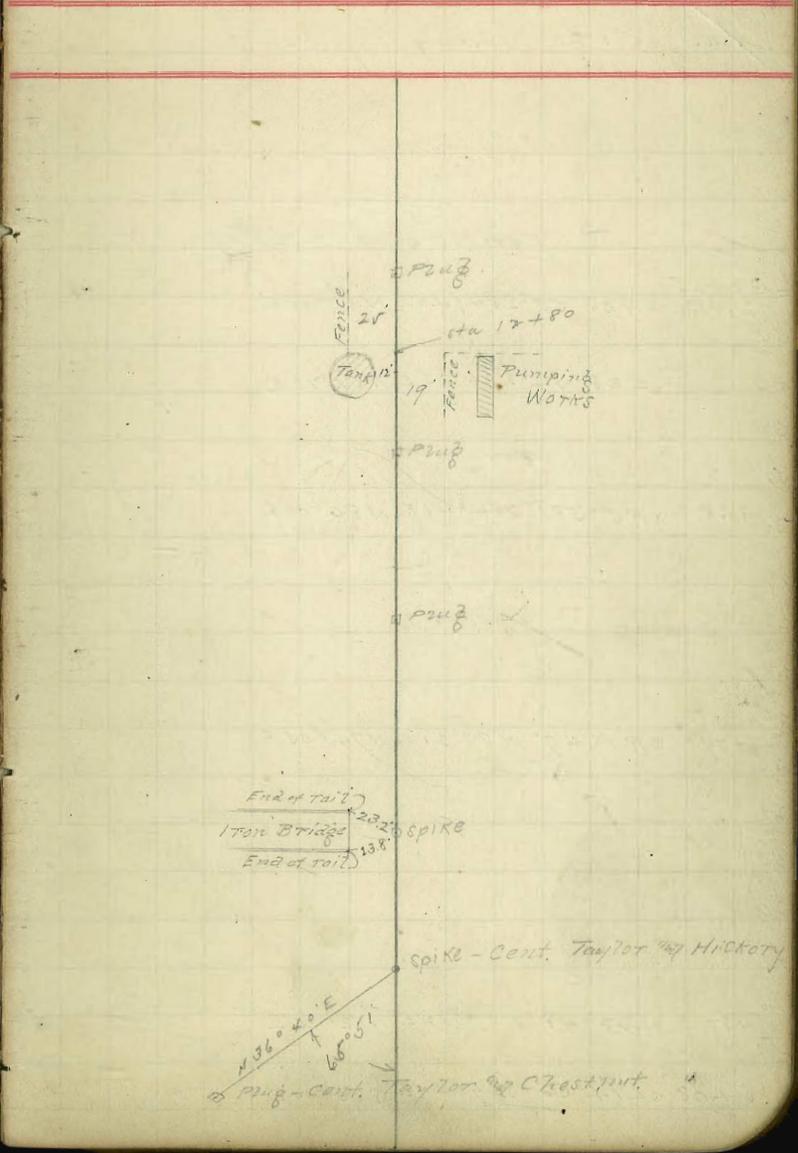
5/2/02

Relocation of Road from
to Sta. 39+65, Spruce

The center of Taylor and Hickory Sts.
Survey, Mission Valley Road

(25)
24

| Sta | Angle | Bearing | Mag. Bear. |
|-----|-------|------------|-------------------------|
| 7 | | | |
| 16 | 368 | | |
| 15 | | R 29° 48' | S 54° 44' E S 69° 45' E |
| 13 | | | |
| 12 | 374 | | |
| 11 | | L 7° 00' | S 84° 32' E N 80° 20' E |
| 10 | | | |
| 9 | 342 | | |
| 8 | | L 11° 20' | S 77° 23' E N 87° 35' E |
| 7 | | | |
| 6 | | | |
| 5 | 344 | | |
| 4 | | | |
| 3 | | | |
| 2 | | R 120° 28' | S 88° 43' E N 76° 35' E |
| 1 | | | |
| 0 | 190 | | N 29° 11' W N 44° 20' W |



Mission Valley Road

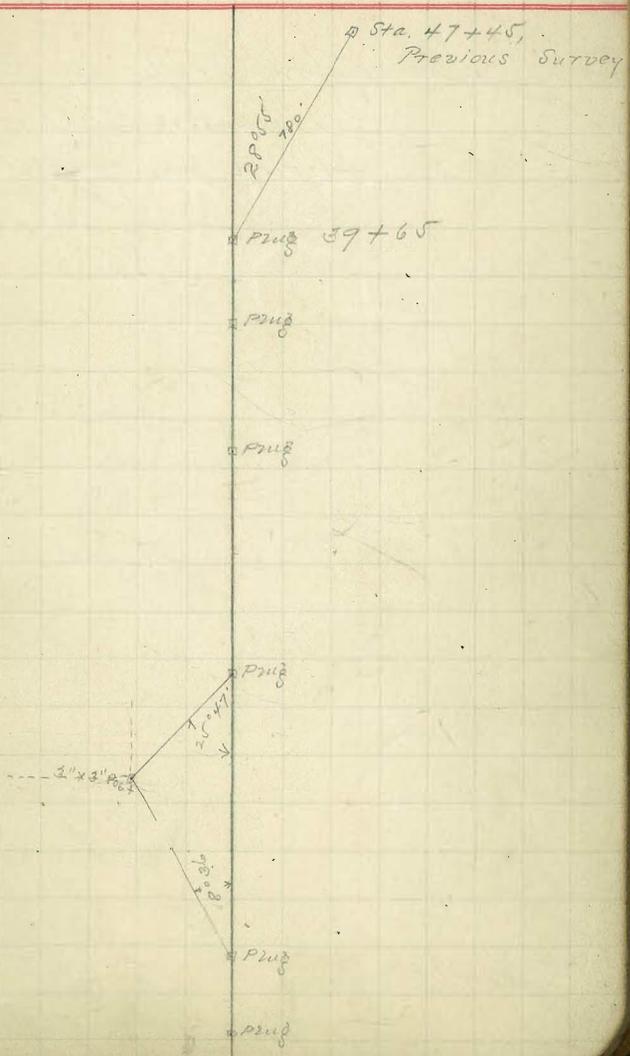
Relocation

(25) 25

Sta. Ang. Bearing Mag. Bear.

Continued on Page 15

| | | | | |
|-------|-------|-----------|-------------|-------------|
| 39+65 | 481.8 | R 22° 55' | S 84° 40' E | N 80° 00' E |
| 34 | 181.0 | | | |
| 33 | | L 22° 51' | N 66° 25' E | N 51° 10' E |
| 32 | 272 | | | |
| 31 | | | | |
| 30+28 | | R 75° 58' | S 84° 41' E | N 80° 00' E |
| 29 | | | | |
| 28 | 449 | | | |
| 27 | | | | |
| 26 | | | | |
| 25+19 | | R 1° 49' | N 89° 21' E | N 74° 05' E |
| 24 | | | | |
| 23 | | | | |
| 22 | 599 | | | |
| 21 | | | | |
| 20 | | | | |
| +80 | | L 22° 48' | N 87° 32' E | N 72° 15' E |
| 19 | | | | |
| 18+08 | 172 | L 14° 56' | S 69° 40' E | S 85° 00' E |

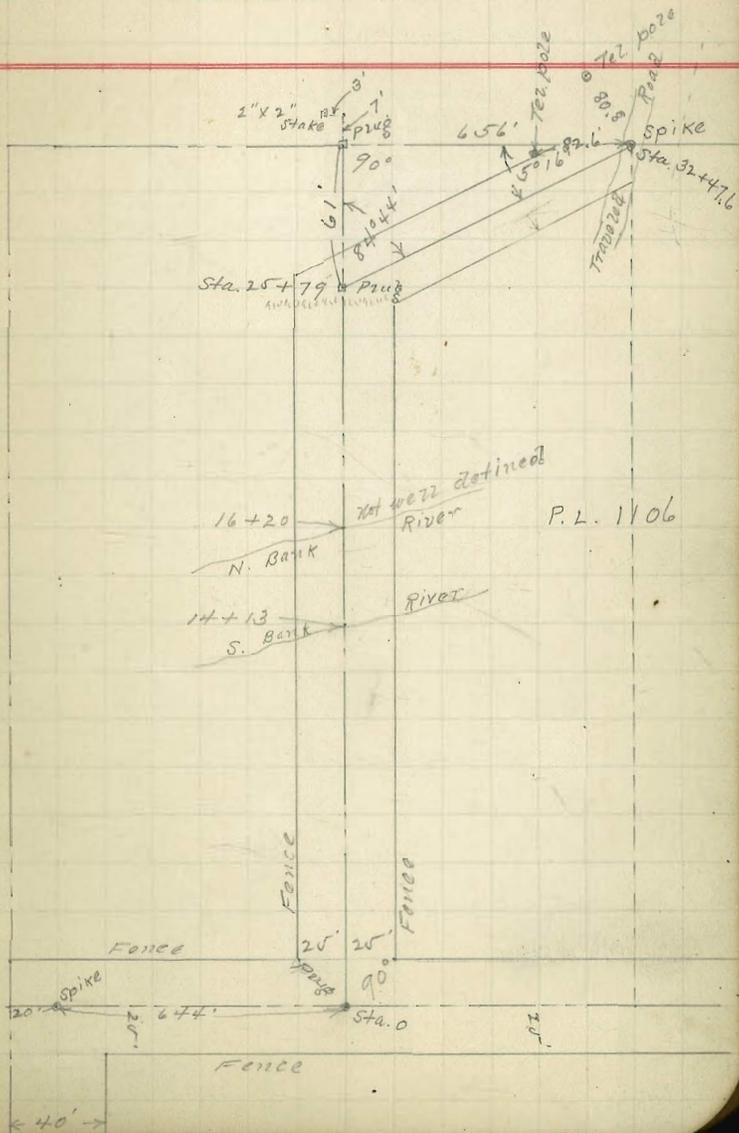


27/2/02
Runway
New
Dawn

Survey for Road in P.L. 1106,
Mission Valley,
as shown on opposite page

2-spans
Bal. Pile Bents,

26



1/3/02

Runway
Kerr
Dunn

Survey for Road from

the Old Town, Dyke to Morena

(27)

| Sta. | Ang. | Beary | Mag. Bea |
|------|------|-------|----------|
|------|------|-------|----------|

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

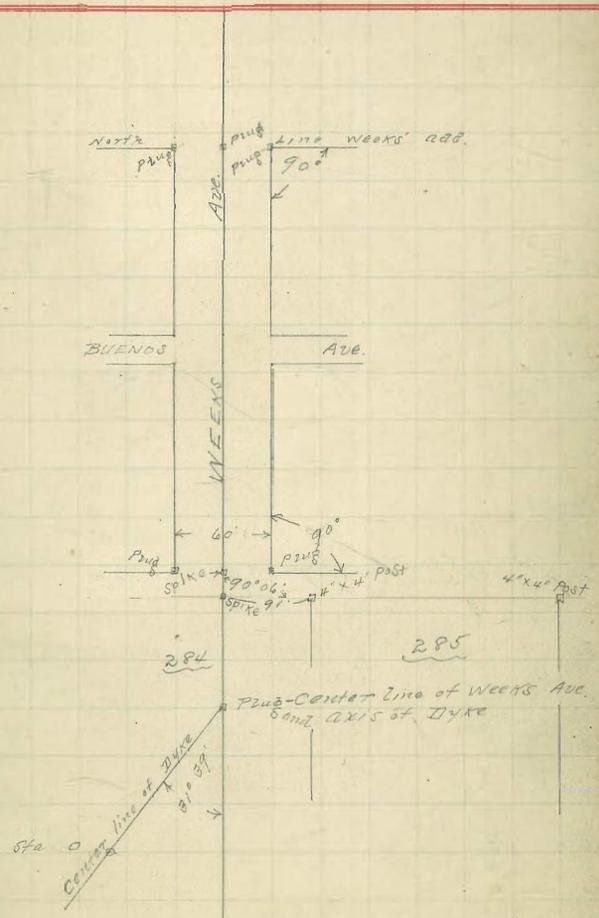
0

+75

+65.5

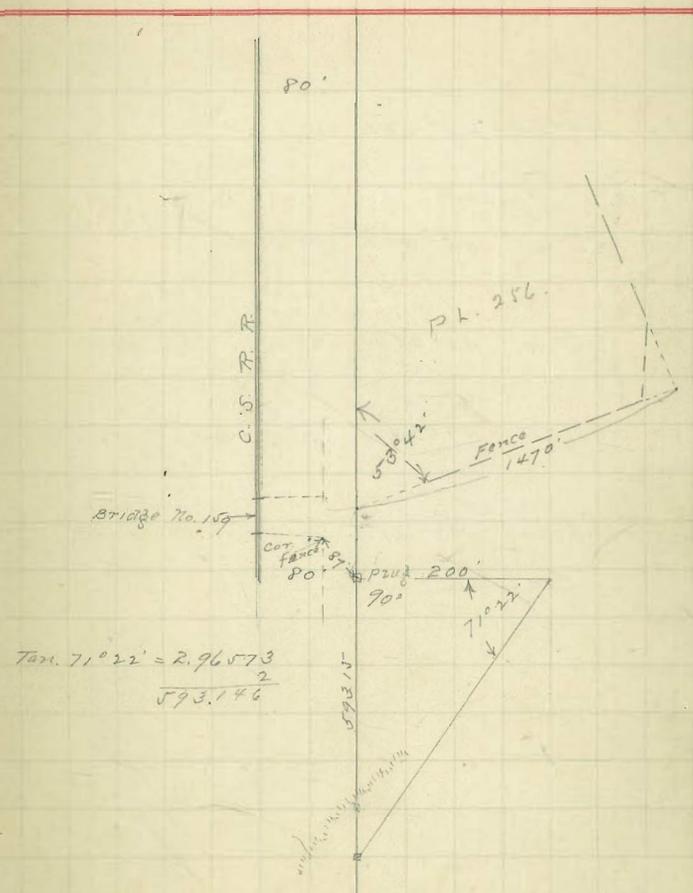
+35.7

N53°20'W, N68°30'W



Old Town Dyke to Moreau

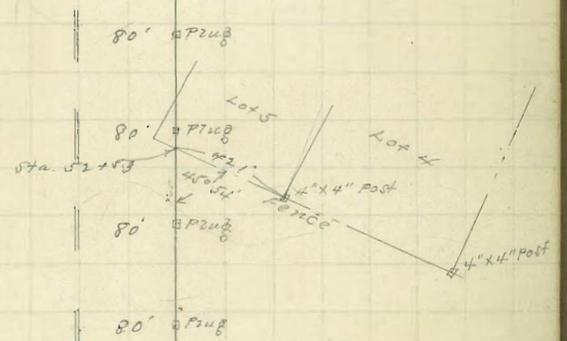
| Sta. | Angle | Bearing | Mag. Bearing |
|-------|-------|-----------|-------------------------|
| 37 | | | |
| 36 | | | |
| 35 | | | |
| 34 | | | |
| 33 | | | |
| 32 | 2187 | | |
| 31 | | | |
| 30 | | | |
| 29 | | | |
| 28+18 | | | |
| 27 | 125 | R 36° 17' | N 17° 03' W N 32° 00' W |
| 26 | | | |
| 25 | | | |
| 24 | | | |
| 23 | | | |
| 22 | 1218 | | |
| 21 | 2393 | | |
| 20 | | | |
| 19 | | | |
| 18 | | | |
| 17 | | | |



Old Town Lyke to Moresnet

| Sta. | Mag | Bearing | Mag. | Beam |
|---------|---------|---------|----------|--------------------------------|
| 58 | | | | |
| 57 + 04 | 0R3°28' | N9°02'E | N6°10'W | |
| 56 | 219 | | | |
| 55 | +85 | 0R6°44' | N5°39'E | N9°30'W |
| 54 | 213 | | | |
| 53 | +72 | 0R6°18' | N1°05'W | N16°15'W S22°30'E |
| 52 | 184 | | | |
| 51 | +88 | 0R6°18' | N7°28'W | N23°00'W S29°15'E (Wire fence) |
| 50 | 213 | | | |
| 49 | +75 | 0R3°22' | N13°41'W | N28°50'W |
| 48 | | | | |
| 47 | | | | |
| 46 | 26°05' | | | |
| 45 | | | | |
| 44 | | | | |
| 43 | | | | |
| 42 | | | | |
| 41 | | | | |
| 40 | | | | |
| 39 | | | | |
| 38 | | | | |

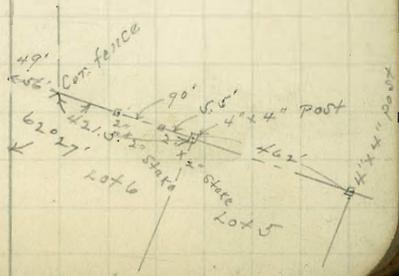
P.T. 80' 0P218



C.S.P.R.

Old Town Lyke to Moreau

| No. | Ang. | Bearing | Mag. Bear. | | | | | | | | | |
|-----|------|---------|------------|--|--|--|--|--|--|--|--|--|
| 79 | | | | | | | | | | | | |
| 78 | | | | | | | | | | | | |
| 77 | | | | | | | | | | | | |
| 76 | | | | | | | | | | | | |
| 75 | | | | | | | | | | | | |
| 74 | | | | | | | | | | | | |
| 73 | | | | | | | | | | | | |
| 72 | | | | | | | | | | | | |
| 71 | | | | | | | | | | | | |
| 70 | 9816 | | | | | | | | | | | |
| 69 | | | | | | | | | | | | |
| 68 | | | | | | | | | | | | |
| 67 | | | | | | | | | | | | |
| 66 | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | |
| 62 | +72 | | | | | | | | | | | |
| 61 | | | | | | | | | | | | |
| 60 | 425 | | | | | | | | | | | |
| 59 | | | | | | | | | | | | |

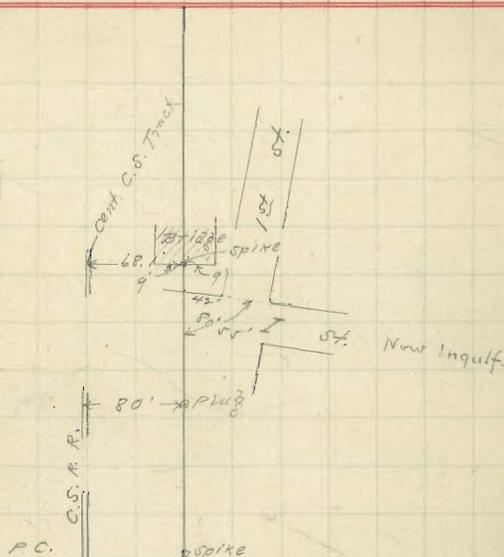


Old Town Leyke to Morane

31

| Sta. | ang. | Bearing | Mag. Obs. |
|------|------|---------|-----------|
|------|------|---------|-----------|

| | | | |
|----|-------|---------|------------------|
| 96 | +18.5 | | |
| | +85 | | |
| 95 | | | |
| 94 | | | |
| 93 | +35 | 916°51' | N0°02'W N15°15'W |
| 92 | | | |
| 91 | | | |
| 90 | +20 | 012°13' | N6°49'E N8°00'W |
| 89 | | | |
| 88 | | | |
| 87 | | | |
| 86 | | | |
| 85 | | | |
| 84 | | | |
| 83 | | | |
| 82 | | | |
| 81 | | | |
| 80 | | | |



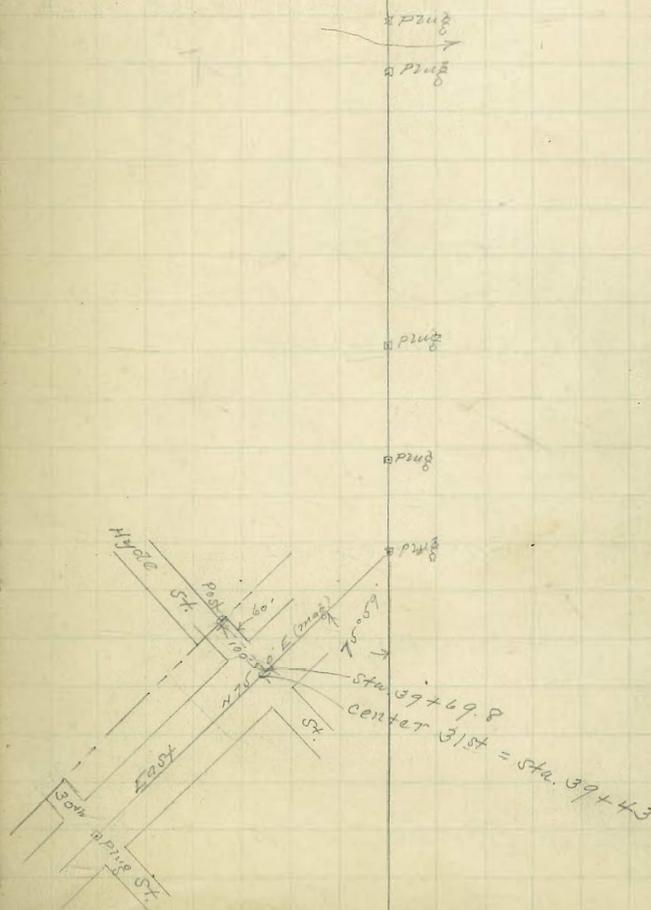
8/3/02
 Runway
 Plan
 Book

Survey for Road from a
 point on A St., Near 32nd St., to
 33rd and F Sts.

See Level Notes for line bet Sta 0th Sta.
 43+90

32

| Sta. | Ang | Bearing | Mag. Dist. |
|------|-----|-------------|-------------------------|
| 56 | | | |
| 55 | +90 | S 73° 51' E | 551.42 E 567.00 E |
| 54 | +90 | S 87° 30' E | N 54° 27' E N 39° 15' E |
| 53 | | | |
| 52 | | | |
| 51 | +59 | S 26° 07' E | N 33° 03' W N 48° 20' W |
| 50 | | | |
| 49 | | | |
| 48 | +03 | S 25° 32' E | N 6° 56' W N 21° 10' W |
| 47 | | | |
| 46 | +83 | S 15° 25' E | N 1° 24' W N 16° 48' W |
| 45 | | | |
| 44 | +90 | | N 14° 01' E N 1° 00' W |
| 43 | | | |



0 = Cent. 25th Sta A

Sta. Ang. Bearing Map Rec.

77 +63.5 0R26°48' 50°03'W 515°15'E

76

75

74

73

72

71

70

69 +10 0L15°9' 526°45'E 542°00'E

68

67

66

65 +99 0R20°07' 511°36'E 526°50'E

64

63 +90 0L13°38' 531°48'E 547°00'E

62

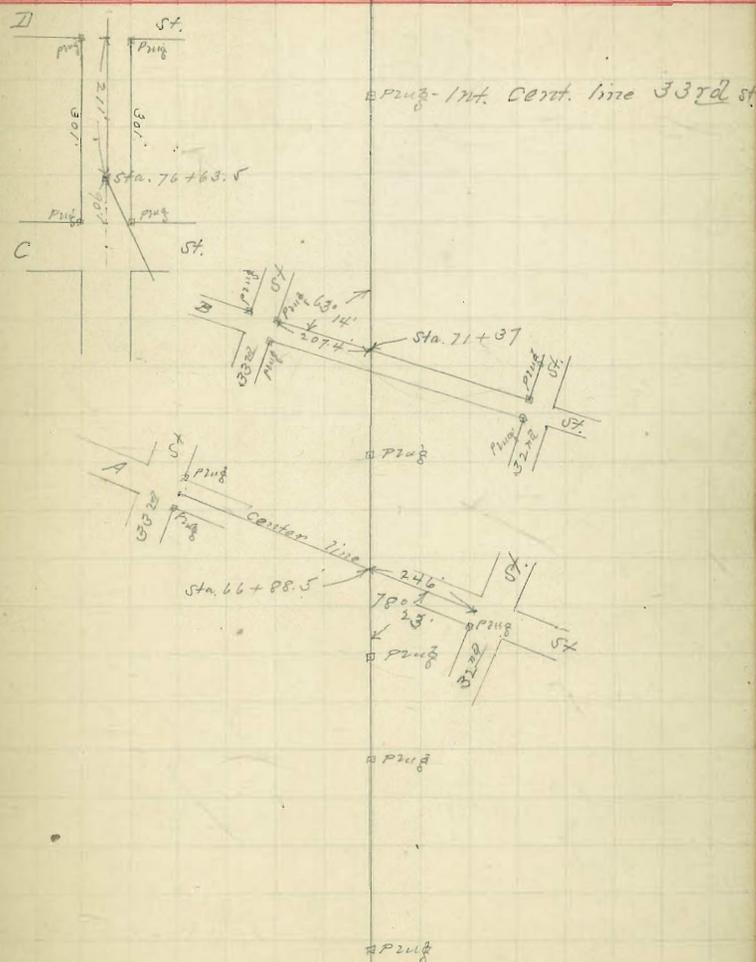
61

60

59 +74 0R33°37' 518°05'E 533°10'E

58

57



| Sta. | Ang. | Bearing | Mag. Bear. |
|------|------|---------|------------|
| 96 | | | |
| 95 | | | |
| 94 | | | |
| 93 | | | |
| 92 | | | |
| 91 | | | |
| 90 | | | |
| 89 | | | |
| 88 | | | |
| 87 | | | |
| 86 | | | |
| 85 | | | |
| 84 | | | |
| 83 | | | |
| 82 | | | |
| 81 | | | |
| 80 | | | |
| 79 | | | |
| 78 | | | |

96

95

94

93

92

91

90

89

88

87

86

85

84

83

82

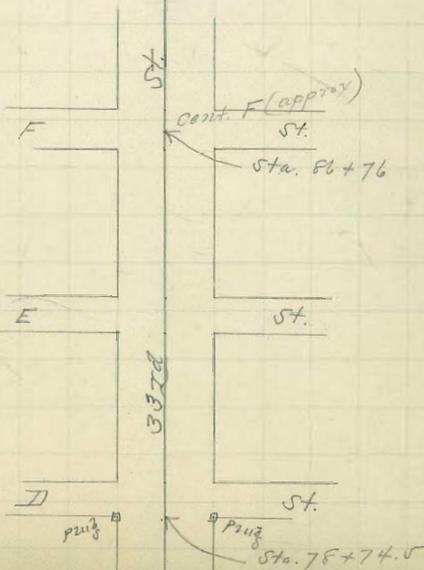
81

80

79

78

+74.5

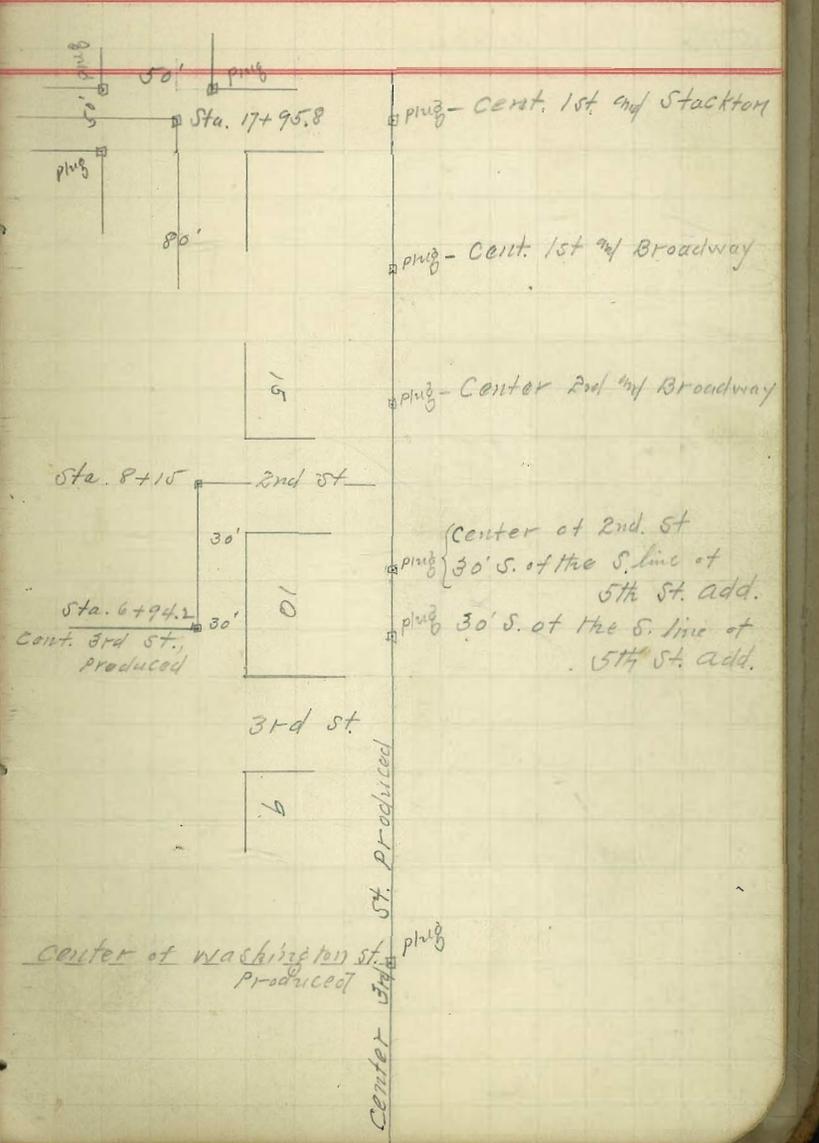


2/7/03

Common Survey of Road from ^{Near} 3rd ^{and} University to the New County
 Wilkinson
 Lambert

University to the New County
 (Hospital) 35

| Sta. | Ang. | Bearing | Mag. Bear |
|------|--------|-----------|-----------|
| 17 | +95.80 | L 89° 50' | |
| 16 | | | |
| 15 | | | |
| 14 | +74.9 | R 90° 0' | |
| 13 | | | |
| 12 | | | |
| 11 | +69.10 | L 89° 47' | |
| 10 | | | |
| 9 | | | |
| 8+15 | | R 89° 52' | |
| 7 | +94.2 | L 89° 58' | |
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |
| 0 | | | |



2/7/03
Primary
Wellman
Lambert

Levels over Center Line of Road

Near
from 3rd and University to New County
(Hospital) 38

| Sta. | + | 0 | - | Red | Elev. |
|------|------|--------|---|-----|--------|
| B.M. | 8.06 | 295.77 | | | 287.71 |
| 0 | | | | 8.1 | 287.7 |
| +33 | | | | 7.8 | 288.0 |
| +50 | | | | 6.4 | 289.4 |
| +70 | | | | 7.5 | 288.3 |
| 1 | | | | 7.2 | 288.6 |
| +50 | | | | 7.1 | 288.7 |
| +75 | | | | 6.7 | 289.1 |
| 2 | | | | 4.8 | 291.0 |
| +20 | | | | 6.9 | 288.9 |
| +50 | | | | 6.7 | 289.1 |
| 3 | | | | 6.5 | 289.3 |
| +50 | | | | 6.2 | 289.6 |
| 4 | | | | 5.7 | 290.1 |
| +35 | | | | 3.3 | 292.5 |
| +50 | | | | 3.8 | 292.0 |
| +65 | | | | 4.9 | 290.9 |
| 5 | | | | 4.5 | 291.3 |
| +30 | | | | 3.2 | 292.6 |
| +50 | | | | 3.7 | 292.1 |
| 6 | | | | 3.0 | 292.8 |

Plug at intersection of 3rd
and Washington Sts

| Sta. | + | 0 | - | Pod | Elev. | |
|------|-------|-----|--------|------|--------|------|
| | +50 | | | 2.8 | 293.0 | |
| | +94.2 | | | 3.2 | 292.6 | Plug |
| 7 | | | | 3.1 | 292.7 | |
| | +50 | | | 3.1 | 292.7 | |
| 8 | | | | 3.4 | 292.4 | |
| B.M. | +15 | 422 | 296.35 | 3.64 | 292.13 | Plug |
| | +50 | | | 4.1 | 292.3 | |
| 9 | | | | 4.1 | 292.3 | |
| | +50 | | | 5.1 | 291.3 | |
| 10 | | | | 5.5 | 290.9 | |
| | +50 | | | 6.0 | 290.4 | |
| 11 | | | | 6.6 | 289.8 | |
| | +50 | | | 7.2 | 289.2 | |
| B.M. | +69.1 | | | 7.69 | 288.66 | Plug |
| | +90 | | | 7.9 | 288.5 | |
| 12 | | | | 7.2 | 289.2 | |
| | +15 | | | 6.5 | 289.9 | |
| | +30 | | | 7.2 | 289.2 | |
| | +50 | | | 7.3 | 289.1 | |
| | +80 | | | 5.1 | 291.3 | |
| 13 | | | | 5.8 | 290.6 | |

| Sta. | + | 0 | - | Prod | Elev. | |
|------|-------|--------|------|------|--------|---------------------------------|
| | +20 | | | 6.1 | 290.3 | |
| | +40 | | | 4.6 | 291.8 | |
| | +50 | | | 4.9 | 291.5 | |
| | +70 | | | 4.9 | 291.5 | |
| 14 | | | | 3.0 | 293.4 | |
| | +25 | | | 4.5 | 291.9 | |
| B.M. | +49 | | | 4.48 | 291.87 | Plug |
| 15 | | | | 4.3 | 292.1 | |
| | +50 | | | 4.5 | 291.9 | |
| 16 | | | | 5.0 | 291.4 | |
| | +50 | | | 6.6 | 289.8 | |
| T.P. | 9.67 | 399.34 | 6.68 | | 289.67 | |
| 17 | | | | 9.6 | 289.7 | |
| | +50 | | | 9.6 | 289.7 | |
| | +95.8 | | | 9.1 | 290.2 | |
| 18 | | | | 9.1 | 290.2 | |
| B.M. | | | | 8.12 | 291.22 | Copper tack top of 5' x 3" Post |
| | +50 | | | 9.4 | 289.9 | N.W. Cor. lot and Stockton |
| 19 | | | | 8.5 | 290.8 | |
| | +50 | | | 7.1 | 292.2 | |
| | +75 | | | 6.1 | 293.2 | |

| Sta. | + | 0 | - | Prod | Elev. |
|------|-------|---|---|------|--------|
| | +95 | | | 6.8 | 292.5 |
| 20 | | | | 6.6 | 292.7 |
| | +35 | | | 6.0 | 293.3 |
| | +50 | | | 5.3 | 294.0 |
| | +65 | | | 4.3 | 295.0 |
| | +85 | | | 5.3 | 294.0 |
| 21 | | | | 4.6 | 294.7 |
| | +12 | | | 5.8 | 293.5 |
| | +30 | | | 4.2 | 295.1 |
| | +50 | | | 5.4 | 293.9 |
| | +60 | | | 6.5 | 292.8 |
| 22 | | | | 6.6 | 292.7 |
| | +25 | | | 5.9 | 293.4 |
| | +35 | | | 7.3 | 292.0 |
| x | +50 | | | 7.4 | 291.9 |
| | +80 | | | 7.6 | 291.7 |
| 23 | | | | 6.7 | 292.6 |
| | +20 | | | 7.9 | 291.4 |
| B.M. | +35.0 | | | 7.69 | 291.65 |
| | +50 | | | 5.9 | 293.4 |
| | +75 | | | 6.4 | 292.9 |

Plug

Re-survey 6/11/03 from
Sta. 22+46.7 to North line P.L. C' 42
(see page 36)

| Sta. | + | 0 | - | Red | Elev. | Sta. | + | 0 | - | Red | Elev. |
|----------|------|--------|------|------|--------|-----------------------------------|---|---|---|------|--------|
| 24 | | | | 4.3 | 295.0 | Plug. Sta. 23+35, Previous Survey | | | | | |
| +25 | | | | 4.2 | 295.1 | B.M. 9.32 300.97 | | | | 9.1 | 291.65 |
| +50 | | | | 3.2 | 296.1 | 22+46.7 | | | | 7.3 | |
| +75 | | | | 3.4 | 295.9 | 23 | | | | 5.7 | |
| 25 | | | | 2.6 | 296.7 | +50 | | | | 5.2 | 958 |
| +23 | | | | 3.6 | 295.7 | 24 | | | | 5.4 | |
| B.M. +50 | 1.80 | 299.24 | 1.90 | | 297.44 | +50 | | | | 8.2 | |
| +60 | | | | 1.5 | 297.7 | 25 | | | | 11.6 | |
| +80 | | | | 4.2 | 295.0 | +50 | | | | 11.9 | 891 |
| 26 | | | | 4.8 | 294.4 | 26 | | | | 13.0 | |
| +50 | | | | 7.6 | 291.6 | +50 | | | | 13.1 | |
| 27 | | | | 8.8 | 290.4 | 27 | | | | 11.6 | |
| +50 | | | | 10.1 | 289.1 | +50 | | | | 9.0 | |
| +67 | | | | 10.2 | 289.0 | 28 | | | | 7.5 | |
| +95 | | | | 8.7 | 290.5 | +50 | | | | 6.5 | |
| 28 | | | | 8.9 | 290.3 | +92.7 | | | | | |
| +12 | | | | 10.3 | 288.9 | North line P.L. C' | | | | | |
| +50 | | | | 9.9 | 289.3 | | | | | | |
| +75 | | | | 8.1 | 291.1 | | | | | | |
| 29 | | | | 8.0 | 291.2 | | | | | | |
| +50 | | | | 6.3 | 292.9 | | | | | | |
| B.M. +81 | | | | 5.62 | 295.62 | | | | | | |

3/17/03

Runway
Wilkinson
Lambert

Survey for Road from
Boundary, of P.L. 1215, to

a point on the North-Easterly
the end of the Old Town Dyke

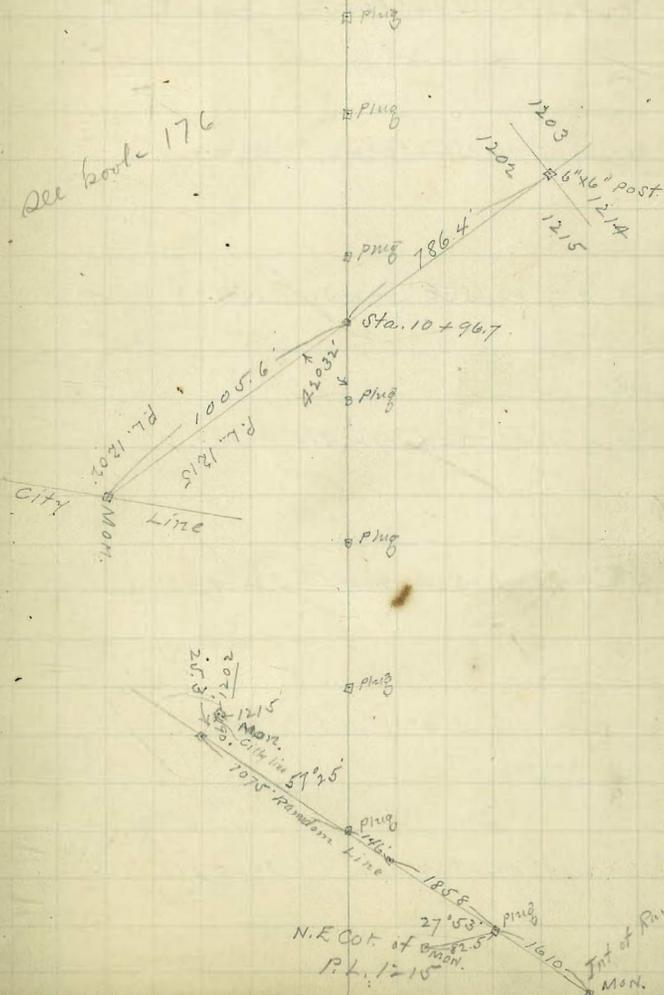
Transit Notes - Pages 43 to 49

Levels Notes - Pages 53 to 70 and 73 to 78

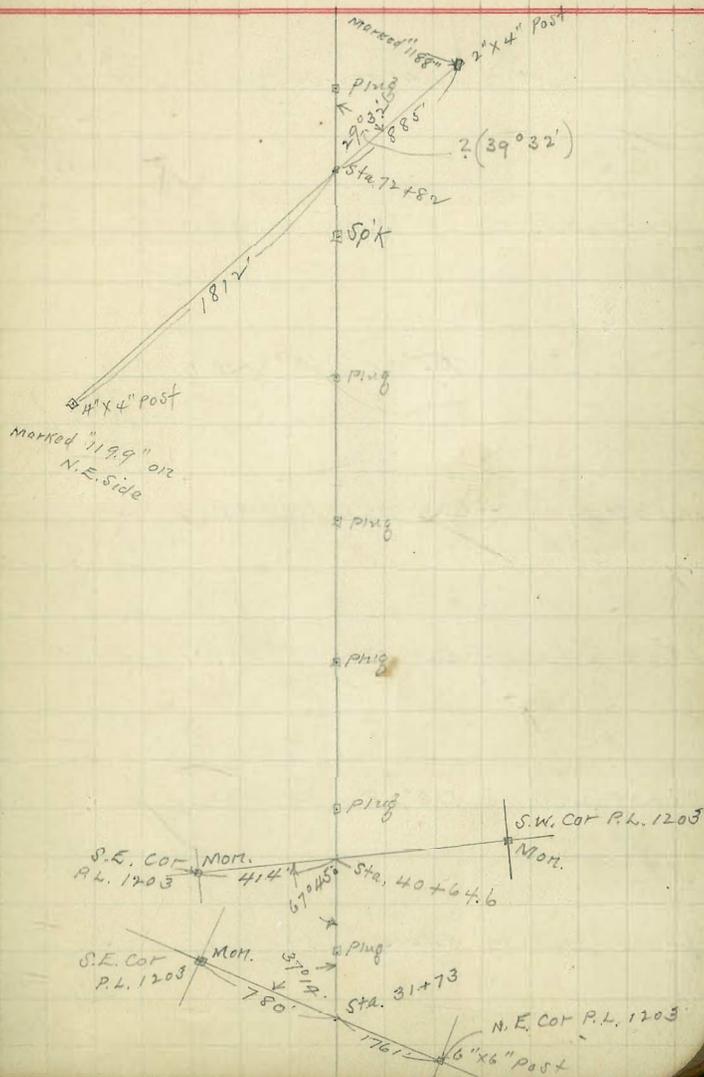
43

| Sta. | Ang | Bearing | Mag. Bear. |
|-------|-----------|-------------|-------------|
| 26+80 | R 11° 38' | S 37° 14' W | S 23° 15' W |
| 22+50 | R 14° 30' | S 25° 36' W | S 11° 40' W |
| 12+50 | L 35° 52' | S 11° 06' W | S 2° 45' E |
| 7+50 | R 24° 20' | S 46° 58' W | S 33° 00' W |
| 4+50 | R 9° 21' | S 22° 38' W | S 8° 40' W |
| 1+07 | L 14° 40' | S 13° 17' W | S 0° 40' E |
| 0 | | S 27° 57' W | S 14° 00' W |

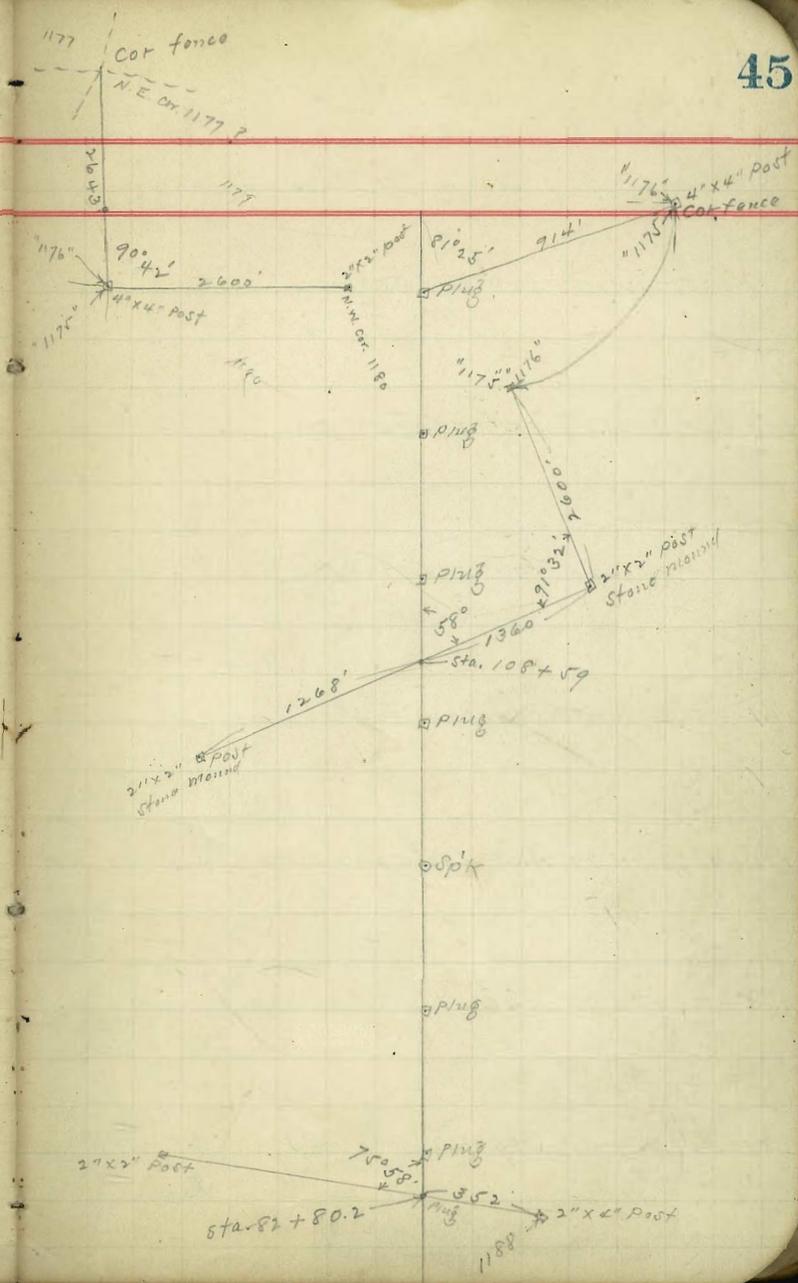
See book 176



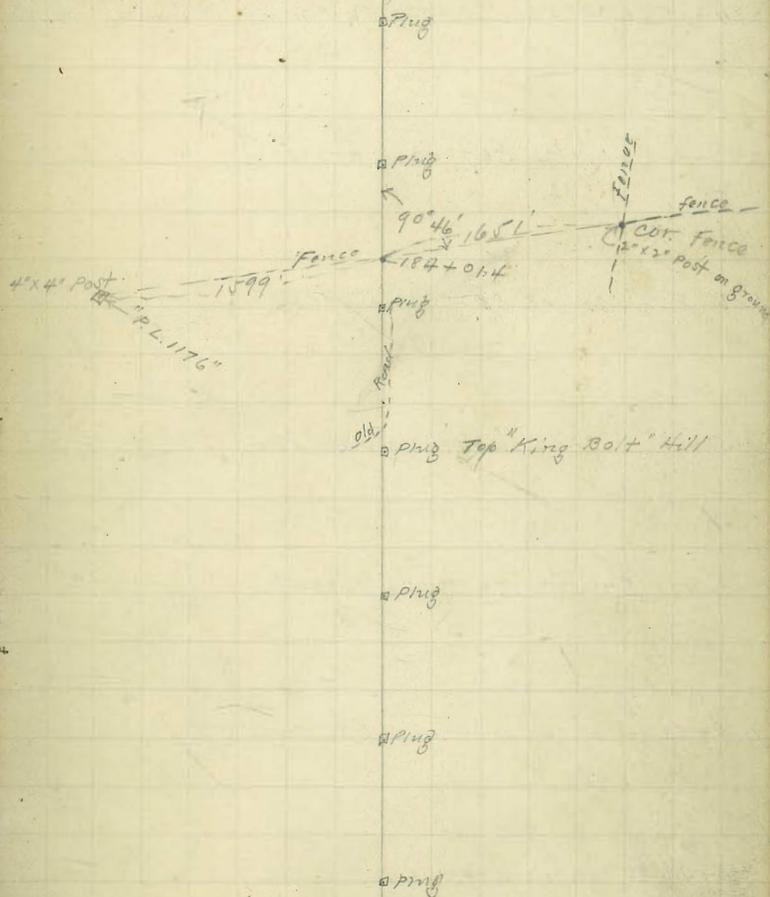
| Sta. | Ang. | Bearing | Mag. Bearing |
|--------|-----------|-------------|--------------|
| 76+50 | R 28° 55' | S 74° 58' W | S 60° 40' W |
| 600' | | | |
| 70+50 | R 15° 26' | S 46° 00' W | S 31° 45' W |
| 1100' | | | |
| 59+50 | R 4° 45' | S 30° 34' W | S 16° 15' W |
| 319/03 | | | |
| 518' | | | |
| 54+32 | L 20° 51' | S 25° 49' W | S 11° 30' W |
| 577' | | | |
| 50+55 | R 4° 26' | S 46° 40' W | S 32° 20' W |
| 805' | | | |
| 42+00 | L 16° 01' | S 6° 14' W | S 7° 50' E |
| 690' | | | |
| 35+10 | L 14° 59' | S 22° 15' W | S 8° 10' W |
| 830' | | | |



| Sta. | Ang. | Bearing | Mag. Bea. |
|--------|-----------|-------------|-------------|
| 141+90 | R 39° 52' | S 49° 31' W | S 35° 15' W |
| 2170 | | | |
| 120+20 | R 5° 10' | S 9° 39' W | S 4° 20' E |
| 640 | | | |
| 113+80 | L 26° 10' | S 4° 29' W | S 9° 25' E |
| 910 | | | |
| 104+70 | R 9° 42' | S 30° 39' W | S 16° 50' W |
| 590 | | | |
| 98+80 | R 7° 29' | S 20° 57' W | S 7° 05' W |
| 775 | | | |
| 91+05 | L 33° 18' | S 13° 28' W | S 0° 30' E |
| 665 | | | |
| 84+40 | L 28° 09' | S 46° 46' W | S 32° 45' W |
| 790 | | | |



| Sta. | Ang | Bearing | Mag. Bear |
|--------|-----------|-------------|-------------|
| 198+35 | R 12° 17' | S 68° 12' W | S 53° 15' N |
| 185+45 | L 33° 55' | S 55° 55' W | S 40° 50' W |
| 180+95 | R 50° 20' | S 89° 50' W | S 74° 45' W |
| 174+45 | L 76° 47' | S 39° 30' W | S 24° 25' W |
| 171+90 | L 17° 39' | N 63° 43' W | N 78° 45' W |
| 165+10 | R 43° 16' | N 46° 04' W | N 61° 00' W |
| 159+80 | R 41° 09' | N 89° 20' W | S 70° 50' W |



| Sta. | Ang | Bearing | Mag. Rem. |
|--------|-------------------------|-------------|-------------|
| 237+51 | | | |
| 230+91 | $\angle 38^{\circ} 11'$ | S 36° 10' W | S 21° 35' W |
| 228+31 | $\angle 38^{\circ} 06'$ | S 74° 21' W | S 59° 40' W |

237+51

260'

230+91 $\angle 38^{\circ} 11'$ S 36° 10' W S 21° 35' W

260'

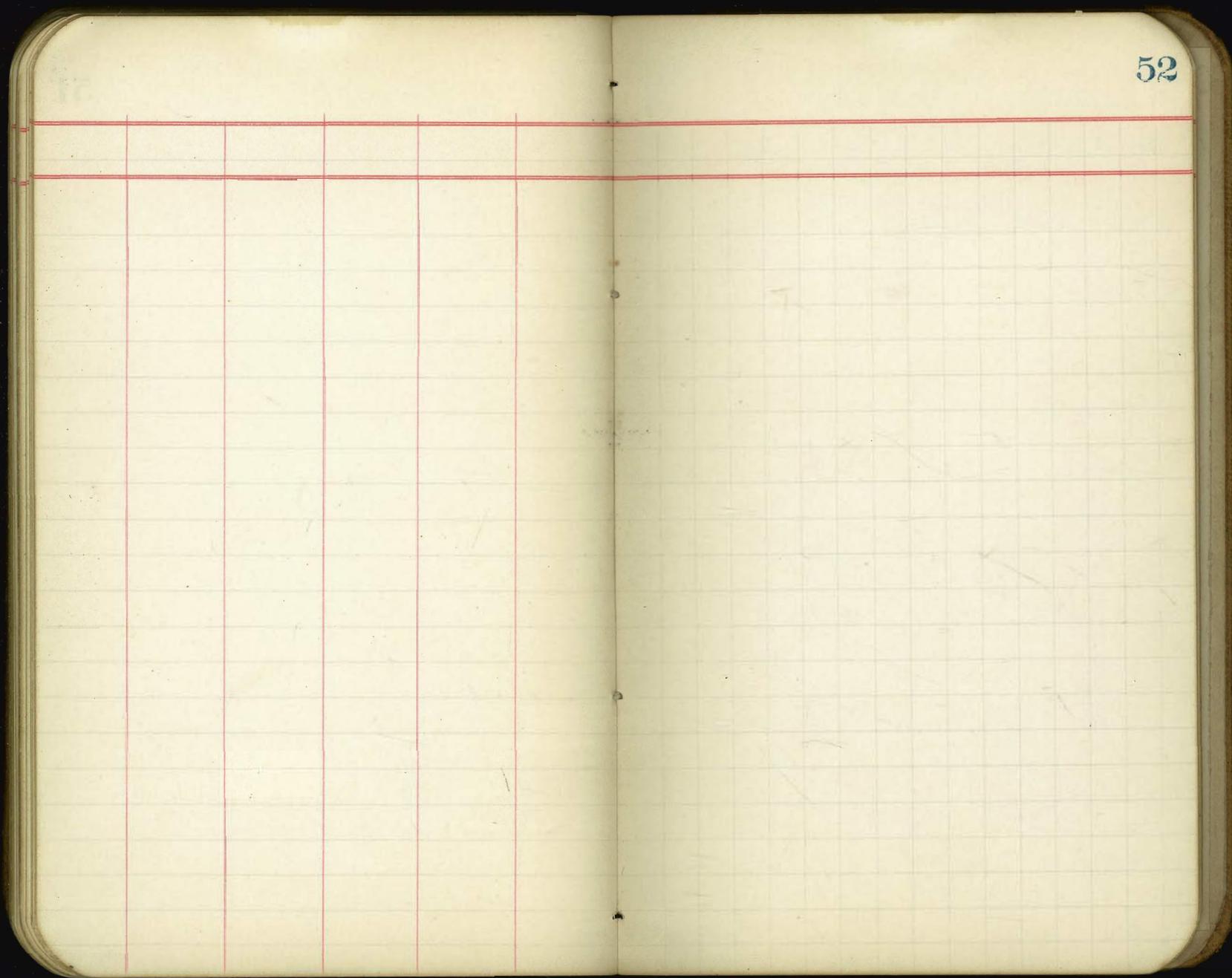
228+31 $\angle 38^{\circ} 06'$ S 74° 21' W S 59° 40' W

292'

see book 176.



The image shows an open notebook with two pages. The left page is ruled with a grid of red lines, creating a table with 6 columns and approximately 20 rows. The right page is ruled with horizontal lines and has the number '50' printed in the top right corner. The notebook has a dark cover and the pages are slightly aged.



3/17/03

Penny
Methuen
LambertLevels for Road, from a
Boundary of P.L. 1215, topoint on the North-Easterly
the end of the Old Town Dyke

| Sta. | + | 0 | - | Pod | Elev. | |
|----------------------|------|--------|-------|-------|--------|-------------------------------|
| B.M. | 6.58 | 506.58 | | | 500.00 | Plug at sta. 0, Elev. assumed |
| 0 | | | | 6.6 | 500.0 | |
| +50 | | | | 4.0 | 502.6 | |
| 1 | | | | 2.8 | 503.8 | |
| +07 ^A | | | | 2.9 | 503.7 | Plug |
| +50 | | | | 4.0 | 502.6 | |
| 2 | | | | 6.4 | 500.2 | |
| +50 | | | | 9.3 | 497.3 | |
| 3 | | | | 11.2 | 495.4 | |
| +50 | | | | 11.7 | 494.9 | |
| 4 | | | | 11.9 | 494.7 | |
| T.P.+50 ^A | 0.63 | 494.91 | 12.30 | | 494.28 | Plug |
| 5 | | | | 2.0 | 492.9 | |
| +50 | | | | 3.4 | 491.5 | |
| 6 | | | | 4.4 | 490.5 | |
| +50 | | | | 6.1 | 488.8 | |
| 7 | | | | 8.8 | 486.1 | |
| +50 ^A | | | | 11.17 | 483.7 | Plug |
| T.P. | 0.33 | 482.70 | 12.54 | | 482.37 | |
| 8 | | | | 1.8 | 480.9 | |
| +50 | | | | 5.5 | 477.2 | |
| | 7.54 | | 24.84 | | | |

| Sta. | + | ± | - | Pod | Elev. |
|------|------|--------|-------|------|--------|
| 9 | | | | 9.4 | 473.3 |
| +50 | | | | 12.4 | 470.3 |
| T.P. | 0.16 | 471.26 | 11.60 | | 471.10 |
| 10 | | | | 3.0 | 468.3 |
| +50 | | | | 5.3 | 466.0 |
| 11 | | | | 8.5 | 462.8 |
| +50 | | | | 11.0 | 460.3 |
| 12 | | | | 12.4 | 458.9 |
| T.P. | 3.54 | 464.41 | 12.39 | | 458.87 |
| +50 | | | | 6.84 | 457.6 |
| 13 | | | | 7.6 | 456.8 |
| +50 | | | | 7.7 | 456.7 |
| 14 | | | | 6.5 | 457.9 |
| +50 | | | | 3.8 | 460.6 |
| 15 | | | | 4.0 | 460.4 |
| +50 | | | | 4.8 | 459.6 |
| 16 | | | | 6.6 | 457.8 |
| +50 | | | | 7.3 | 457.1 |
| 17 | | | | 7.9 | 456.5 |
| +50 | | | | 8.2 | 456.2 |
| 18 | | | | 8.6 | 455.8 |
| | 5.70 | | 28.99 | | |

Blug

| Sta. | + | 0 | - | Pod | Elev |
|-------|------|--------|-------|-------|--------|
| T.P. | 0.74 | 456.57 | 8.58 | | 455.83 |
| +50 | | | | 1.1 | 455.5 |
| 19 | | | | 1.8 | 454.84 |
| +50 | | | | 3.5 | 453.1 |
| 20 | | | | 5.2 | 451.4 |
| +50 | | | | 7.2 | 449.4 |
| 21 | | | | 8.4 | 448.2 |
| +50 | | | | 8.9 | 447.7 |
| 22 | | | | 10.0 | 446.6 |
| +50 | | | | 10.69 | 445.88 |
| 23 | | | | 11.4 | 445.2 |
| +50 | | | | 11.8 | 444.8 |
| 24 | | | | 12.2 | 444.4 |
| T.P. | 0.62 | 444.87 | 12.32 | | 444.25 |
| +50 | | | | 1.1 | 443.8 |
| 25 | | | | 2.7 | 442.2 |
| +50 | | | | 4.3 | 440.6 |
| 26 | | | | 6.0 | 438.9 |
| +50 | | | | 8.4 | 436.5 |
| 26+80 | | | | 10.20 | 434.7 |
| 27 | | | | 10.6 | 434.3 |
| | 1.36 | | 20.90 | | |

Plug

| Sta. | + | o | - | Red | Elev. |
|---------|------|--------|-------|------|-------------|
| | +50 | | | 12.8 | 431.1 |
| T.P. | 2.89 | 434.78 | 12.98 | | 431.89 |
| 28 | | | | 4.4 | 430.4 |
| | +50 | | | 5.6 | 429.2 |
| 29 | | | | 7.4 | 427.4 |
| | +50 | | | 8.6 | 426.2 |
| 30 | | | | 9.2 | 425.6 |
| | +50 | | | 10.0 | 424.8 |
| 31 | | | | 10.1 | 424.7 |
| | +50 | | | 9.9 | 424.9 |
| T.P. | 3.12 | 428.62 | 9.28 | | 425.50 |
| 32 | | | | 3.8 | 424.8 |
| | +50 | | | 4.1 | 424.5 |
| 33 | | | | 4.7 | 423.9 |
| | +50 | | | 5.3 | 423.3 |
| 34 | | | | 5.5 | 423.1 |
| | +50 | | | 6.8 | 421.8 |
| 35 | | | | 6.9 | 421.7 |
| T.P.+10 | 3.24 | 425.16 | 6.70 | | 421.92 Plug |
| | +50 | | | 2.0 | 423.2 |
| 36 | | | | 3.1 | 422.1 |
| | 9.25 | | 28.96 | | |

3/19/03

57

| Sta. | + | 0 | - | Ord | Elev. |
|------|------|--------|------|-----|--------|
| +50 | | | | 2.8 | 422.4 |
| 37 | | | | 3.5 | 421.7 |
| +50 | | | | 4.9 | 420.3 |
| 38 | | | | 5.9 | 419.3 |
| +50 | | | | 6.2 | 419.0 |
| 39 | | | | 6.8 | 418.4 |
| +50 | | | | 7.2 | 418.0 |
| 40 | | | | 7.4 | 417.8 |
| +50 | | | | 8.2 | 417.0 |
| 41 | | | | 9.1 | 416.1 |
| +50 | | | | 9.6 | 415.6 |
| 42 | | | | | 415.17 |
| T.P. | 3.95 | 419.12 | 9.99 | | |
| +50 | | | | 4.8 | 414.3 |
| 43 | | | | 5.4 | 413.7 |
| +50 | | | | 6.7 | 412.4 |
| 44 | | | | 7.6 | 411.5 |
| +50 | | | | 7.4 | 411.7 |
| 45 | | | | 6.5 | 412.6 |
| +50 | | | | 5.4 | 413.7 |
| 46 | | | | 5.0 | 414.1 |
| +50 | | | | 4.2 | 414.9 |

| Sta. | + | 0 | - | Pod | Ele. |
|---------|-------|--------|------|------|--------|
| 47 | | | | 3.3 | 415.8 |
| +50 | | | | 2.2 | 416.9 |
| 48 | | | | 0.8 | 418.3 |
| T.P. | 11.45 | 430.56 | 0.01 | | 419.11 |
| +50 | | | | 10.5 | 420.1 |
| 49 | | | | 8.1 | 422.5 |
| +50 | | | | 4.5 | 426.1 |
| 50 | | | | 2.5 | 428.1 |
| +50 | | | | 2.6 | 428.0 |
| T.P.+55 | 1.08 | 429.10 | 2.54 | | 428.02 |
| 51 | | | | 1.2 | 427.9 |
| +50 | | | | 1.2 | 427.9 |
| 52 | | | | 2.1 | 427.0 |
| +50 | | | | 3.8 | 425.3 |
| 53 | | | | 5.1 | 424.0 |
| +50 | | | | 6.1 | 423.0 |
| 54 | | | | 7.1 | 422.0 |
| +32 | | | | 7.42 | 421.7 |
| +50 | | | | 7.7 | 421.4 |
| 55 | | | | 8.1 | 421.0 |
| +50 | | | | 8.7 | 420.4 |
| | 12.53 | | 2.55 | | |

Plug

Plug

| Sta. | + | 0 | - | Red | Elev. |
|------|------|--------|-------|------|--------|
| 56 | | | | 9.0 | 420.1 |
| +50 | | | | 9.3 | 419.8 |
| 57 | | | | 9.3 | 419.8 |
| T.P. | 2.11 | 422.21 | 9.00 | | 420.10 |
| +50 | | | | 2.7 | 419.5 |
| 58 | | | | 3.6 | 418.6 |
| +50 | | | | 4.3 | 417.9 |
| 59 | | | | 4.5 | 417.7 |
| +50 | | | | 4.94 | 417.27 |
| 60 | | | | 5.2 | 417.0 |
| +50 | | | | 5.9 | 416.3 |
| 61 | | | | 5.9 | 416.3 |
| +50 | | | | 5.6 | 416.6 |
| 62 | | | | 7.1 | 415.1 |
| +50 | | | | 7.3 | 414.9 |
| 63 | | | | 7.9 | 414.3 |
| +50 | | | | 8.7 | 413.5 |
| 64 | | | | 9.6 | 412.6 |
| +50 | | | | 9.0 | 413.2 |
| T.P. | 5.01 | 418.42 | 8.80 | | 413.21 |
| 65 | | | | 5.2 | 413.2 |
| | 7.12 | | 17.80 | | |

Plug

| Sta. | + | 0 | - | Pod | Elev. |
|---------|------|--------|------|-----|--------|
| +50 | | | | 5.1 | 413.3 |
| 66 | | | | 4.9 | 413.5 |
| +50 | | | | 5.6 | 412.8 |
| 67 | | | | 7.0 | 411.4 |
| +50 | | | | 5.6 | 412.8 |
| 68 | | | | 5.7 | 412.7 |
| +50 | | | | 4.9 | 413.5 |
| 69 | | | | 4.6 | 413.8 |
| +50 | | | | 4.2 | 414.2 |
| 70 | | | | 2.7 | 415.7 |
| T.P.+50 | 1.43 | 417.43 | 2.42 | | 416.00 |
| 71 | | | | 1.4 | 416.0 |
| +50 | | | | 3.1 | 415.3 |
| 72 | | | | 3.0 | 414.4 |
| +50 | | | | 3.5 | 413.9 |
| 73 | | | | 3.7 | 413.7 |
| +50 | | | | 5.5 | 411.9 |
| 74 | | | | 6.9 | 410.5 |
| +50 | | | | 7.7 | 409.7 |
| 75 | | | | 8.2 | 409.2 |
| +50 | | | | 8.1 | 409.3 |

plug

| Sta. | + | ± | - | Pod | Elev. |
|-------|------|--------|------|------|--------|
| 76 | | | | 8.9 | 408.5 |
| +50 Δ | | | | 9.30 | 408.1 |
| 77 | | | | 9.2 | 408.2 |
| +50 | | | | 9.9 | 407.5 |
| T. T. | 5.30 | 412.93 | 9.80 | | 407.63 |
| 78 | | | | 4.9 | 408.0 |
| +50 | | | | 5.4 | 407.5 |
| 79 | | | | 5.7 | 407.2 |
| +50 | | | | 5.8 | 407.1 |
| 80 | | | | 5.7 | 407.2 |
| +50 | | | | 5.5 | 407.4 |
| 81 | | | | 5.4 | 407.5 |
| +50 | | | | 5.3 | 407.6 |
| 82 | | | | 6.3 | 406.6 |
| +50 | | | | 6.4 | 406.5 |
| 83 | | | | 5.0 | 407.9 |
| +50 | | | | 6.3 | 406.6 |
| 84 | | | | 7.0 | 405.9 |
| +40 Δ | | | | 6.66 | 406.27 |
| +50 | | | | 6.5 | 406.4 |
| 85 | | | | 7.9 | 405.0 |

Plug

Plug

| Sta. | + | 6 | - | Pod | Elev. |
|------|------|--------|------|------|--------|
| | +50 | | | 8.1 | 404.8 |
| 86 | | | | 7.6 | 405.3 |
| | +50 | | | 7.4 | 405.5 |
| T.T. | 5.85 | 411.21 | 7.57 | | 405.36 |
| 87 | | | | 5.2 | 406.0 |
| | +50 | | | 7.7 | 403.5 |
| 88 | | | | 8.1 | 403.1 |
| | +50 | | | 8.6 | 402.6 |
| 89 | | | | 8.3 | 402.9 |
| | +50 | | | 9.4 | 401.8 |
| 90 | | | | 9.8 | 401.4 |
| | +50 | | | 9.5 | 401.7 |
| 91 | | | | 8.4 | 402.8 |
| | +05 | | | 8.21 | 403.0 |
| | +50 | | | 9.2 | 402.0 |
| | +85 | | | 11.8 | 399.4 |
| 92 | | | | 10.9 | 400.3 |
| | +50 | | | 6.2 | 405.0 |
| 93 | | | | 3.8 | 407.4 |
| | +50 | | | 2.3 | 408.9 |
| 94 | | | | 1.0 | 410.2 |

Plug

| Sto. | + | o | - | Pod | Elev. |
|----------|-------|--------|------|------|--------|
| T.P. | 6.54 | 416.79 | 0.96 | | 410.25 |
| +50 | | | | 7.2 | 409.6 |
| 95 | | | | 9.0 | 407.8 |
| +50 | | | | 8.0 | 408.8 |
| 96 | | | | 8.2 | 408.6 |
| +50 | | | | 5.4 | 411.4 |
| 97 | | | | 4.7 | 412.1 |
| +50 | | | | 5.2 | 411.6 |
| 98 | | | | 4.9 | 411.9 |
| +50 | | | | 4.2 | 412.6 |
| T.P. +80 | 10.79 | 423.88 | 3.70 | | 413.09 |
| 99 | | | | 10.1 | 410.8 |
| +50 | | | | 9.9 | 414.0 |
| 100 | | | | 9.8 | 414.1 |
| +50 | | | | 9.4 | 414.5 |
| 101 | | | | 8.8 | 415.1 |
| +50 | | | | 8.1 | 415.8 |
| 102 | | | | 6.6 | 417.3 |
| +50 | | | | 7.1 | 416.8 |
| 103 | | | | 6.1 | 417.8 |
| +50 | | | | 5.6 | 418.3 |

Spk

| Sta. | + | 0 | - | Pod | Elv. |
|--------------|------|--------|------|------|-------------|
| 104 | | | | 5.1 | 418.8 |
| +50 | | | | 4.8 | 419.1 |
| +70 Δ | | | | 4.10 | 419.78 Plug |
| 105. | | | | 5.9 | 418.0 |
| +50 | | | | 5.8 | 418.1 |
| 106 | | | | 6.6 | 417.3 |
| +50 | | | | 6.7 | 417.2 |
| T. P. | 3.30 | 420.39 | 6.79 | | 417.09 |
| 107 | | | | 1.8 | 418.6 |
| +50 | | | | 3.4 | 417.0 |
| 108 | | | | 4.1 | 416.3 |
| +50 | | | | 5.0 | 415.4 |
| 109 | | | | 4.7 | 415.7 |
| +50 | | | | 4.0 | 416.4 |
| 110 | | | | 5.6 | 414.8 |
| +50 | | | | 5.3 | 415.1 |
| 111 | | | | 4.8 | 415.6 |
| +50 | | | | 4.6 | 415.8 |
| 112 | | | | 4.8 | 415.6 |
| +50 | | | | 5.5 | 414.9 |
| 113 | | | | 4.6 | 415.8 |

| No. | + | - | - | Prd | Elev | |
|-------|------|--------|-------|-------|--------|------|
| +50 | | | | 6.6 | 413.8 | |
| +80 | 3.86 | 418.99 | 5.26 | | 415.13 | Plug |
| 114 | | | | 3.7 | 415.3 | |
| +50 | | | | 4.5 | 414.5 | |
| 115 | | | | 4.5 | 414.5 | |
| +50 | | | | 3.6 | 415.4 | |
| 116 | | | | 2.2 | 416.8 | |
| +50 | | | | 1.8 | 417.2 | |
| 117 | | | | 1.9 | 417.1 | |
| +50 | | | | 1.8 | 417.2 | |
| 118 | | | | 1.9 | 417.1 | |
| +50 | | | | 3.1 | 415.9 | |
| 119 | | | | 4.7 | 414.3 | |
| +50 | | | | 5.9 | 413.1 | |
| 120 | | | | 5.7 | 413.3 | |
| +20 | | | | 6.1 | 412.9 | |
| +50 | | | | 6.9 | 412.1 | |
| 121 | | | | 8.4 | 410.6 | |
| +50 | | | | 9.0 | 410.0 | |
| 122 | | | | -10.9 | 408.1 | |
| T. P. | 0.73 | 408.66 | 11.06 | | 407.93 | |

| Sta. | + | 0 | - | Red | Elev. |
|------|------|--------|-------|-------|--------|
| +50 | | | | 1.0 | 407.7 |
| 123 | | | | 2.7 | 406.0 |
| +50 | | | | 4.8 | 403.9 |
| 124 | | | | 7.1 | 401.6 |
| +50 | | | | 9.0 | 399.7 |
| 125 | | | | 9.8 | 398.9 |
| T.P. | 0.64 | 397.62 | 11.68 | | 396.98 |
| +50 | | | | 1.5 | 396.1 |
| 126 | | | | 3.2 | 394.4 |
| +50 | | | | 5.1 | 392.5 |
| 127 | | | | 6.5 | 391.1 |
| +50 | | | | 8.5 | 389.1 |
| 128 | | | | 9.9 | 387.7 |
| +50 | | | | 10.7 | 386.9 |
| 129 | | | | 12.00 | 385.62 |
| T.P. | 0.78 | 386.91 | 11.49 | | 386.13 |
| +50 | | | | 3.3 | 383.6 |
| 130 | | | | 4.5 | 382.4 |
| +50 | | | | 4.9 | 382.0 |
| 131 | | | | 6.1 | 380.8 |
| +50 | | | | 6.6 | 380.3 |

| Sta. | + | 0 | - | Red | Blk. |
|------|------|--------|-------|------|--------|
| 132 | | | | 7.0 | 379.9 |
| +50 | | | | 8.7 | 378.2 |
| 133 | | | | 10.6 | 376.3 |
| +50 | | | | 12.0 | 374.9 |
| T.P. | 0.53 | 375.65 | 11.79 | | 375.12 |
| 134 | | | | 1.7 | 374.0 |
| +50 | | | | 3.3 | 372.4 |
| 135 | | | | 4.5 | 371.2 |
| +50 | | | | 5.4 | 370.3 |
| 136 | | | | 6.8 | 368.9 |
| +50 | | | | 9.4 | 366.3 |
| 137 | | | | 11.5 | 364.2 |
| T.P. | 0.54 | 364.66 | 11.53 | | 364.12 |
| +50 | | | | 6.5 | 358.2 |
| 138 | | | | 7.8 | 356.9 |
| +50 | | | | 9.7 | 355.0 |
| 139 | | | | 11.1 | 353.6 |
| +50 | | | | 10.4 | 354.3 |
| 140 | | | | 10.2 | 352.5 |
| +50 | | | | 9.2 | 353.5 |
| 141 | | | | 8.5 | 356.2 |

| Sta. | + | - | Pod | Elev. |
|--------|------|--------|-------|--------|
| +50 | | | 8.5 | 356.1 |
| +90 | | | 8.29 | 356.37 |
| 142+50 | | | 11.2 | 353.5 |
| T. P. | 0.00 | 353.10 | 11.56 | 353.10 |
| 143 | | | 2.4 | 350.7 |
| +50 | | | 3.2 | 349.9 |
| 144 | | | 5.0 | 348.1 |
| +50 | | | 5.5 | 347.6 |
| 145 | | | 7.6 | 345.5 |
| +50 | | | 8.6 | 344.5 |
| 146 | | | 6.4 | 346.7 |
| +50 | | | 5.4 | 347.7 |
| 147 | | | 5.8 | 347.3 |
| +50 | | | 6.0 | 347.1 |
| 148 | | | 6.7 | 346.4 |
| +50 | | | 7.5 | 345.6 |
| 149 | | | 9.1 | 344.0 |
| +50 | | | 10.4 | 342.7 |
| 150 | | | 11.3 | 341.8 |
| T. P. | 2.10 | 344.46 | 10.74 | 342.36 |
| +50 | | | 3.8 | 340.7 |

Plug

| Sta. | + | 0 | - | Red | Elev |
|-------|------|--------|-------|------|--------|
| 151 | | | | 4.4 | 340.1 |
| +50 | | | | 4.8 | 339.7 |
| 152 | | | | 5.2 | 339.3 |
| +50 | | | | 4.8 | 339.7 |
| 153 | | | | 4.6 | 339.9 |
| +50 | | | | 4.8 | 339.7 |
| 154 | | | | 4.5 | 340.0 |
| +50 | | | | 4.2 | 340.3 |
| 155 | | | | 5.1 | 339.4 |
| +50 | | | | 6.2 | 338.3 |
| 156 | | | | 7.5 | 337.0 |
| +50 | | | | 8.5 | 336.0 |
| 157 | | | | 10.0 | 334.5 |
| +50 | | | | 11.5 | 333.0 |
| T. P. | 1.81 | 335.16 | 11.11 | | 333.35 |
| 158 | | | | 2.2 | 333.0 |
| +50 | | | | 2.1 | 333.1 |
| 159 | | | | 2.5 | 332.7 |
| +50 | | | | 2.1 | 333.1 |
| +80 | | | | 1.07 | 324.5 |
| 160 | | | | 2.9 | 332.3 |

Plug

| Sta. | + | - | - | Prod | Elev. |
|----------------|------|--------|-------|------|--------|
| +50 | | | | 3.5 | 331.7 |
| 161 | | | | 3.6 | 331.6 |
| +50 | | | | 6.3 | 328.9 |
| 162 | | | | 6.5 | 328.7 |
| +50 | | | | 7.5 | 327.7 |
| 163 | | | | 8.2 | 327.0 |
| +50 | | | | 9.2 | 326.0 |
| 164 | | | | 9.7 | 325.5 |
| +50 | | | | 9.7 | 325.5 |
| 165 | | | | 9.5 | 325.7 |
| +10 | 0.75 | 326.57 | 9.34 | | 325.82 |
| 6/10/63 +50 | | | | 3.8 | 322.8 |
| 166 | | | | 6.2 | 320.4 |
| +50 | | | | 7.0 | 319.6 |
| 167 | | | | 6.8 | 319.8 |
| +50 | | | | 5.6 | 311.0 |
| 168 | | | | 6.7 | 319.9 |
| +50 | | | | 8.3 | 318.3 |
| 169 | | | | 10.0 | 316.6 |
| +50 | | | | 11.7 | 314.9 |
| T.P. | 8.80 | 323.60 | 11.77 | | 314.80 |

Continued on page 73

4/6/03
 Council
 Mann
 Waulff

Cross-sections of Hawthorn

St. from 5th St. to City Park line

| Sta | + | - | H.I. | Rod | Elw |
|---------|----------------------------------|------|--------|-------|------------|
| | 10.57 | | 207.26 | | 196.75-200 |
| | 6.48 | 2.92 | 210.82 | | 204.34 |
| | East line of 5 th St. | | | | |
| N. line | | | | 11.70 | 199.12 |
| curb | | | | 12.50 | 198.32 |
| 1/4 | | | | 13.00 | 197.82 |
| C | | | | 13.30 | 197.52 |
| 1/4 | | | | 13.80 | 197.02 |
| curb | | | | 14.80 | 196.02 |
| S. line | | | | 14.80 | 196.32 |
| | 35' east of 5 th St. | | | | |
| S. line | | | | 9.90 | 200.92 |
| curb | | | | 10.10 | 200.72 |
| 1/4 | | | | 10.40 | 200.42 |
| C | | | | 10.90 | 199.92 |
| 1/4 | | | | 10.90 | 199.92 |
| curb | | | | 10.60 | 200.22 |
| N. line | | | | 11.70 | 199.12 |

| Sta. | + | - | H.I. | Rod. | Elw |
|---------|---------------------------------|---|------|------|--------|
| | 50' east of 5 th St. | | | | |
| N. line | | | | 6.00 | 204.52 |
| curb | | | | 5.80 | 205.02 |
| 5 | | | | 6.70 | 204.12 |
| 1/4 | | | | 5.0 | 205.82 |
| C | | | | 4.90 | 205.92 |
| 1/4 | | | | 3.10 | 207.72 |
| curb | | | | 3.60 | 207.22 |
| S. line | | | | 3.60 | 207.22 |
| | 75' east of 5 th St. | | | | |
| S. line | | | | 1.80 | 209.0 |
| curb | | | | 1.00 | 209.8 |
| 1/4 | | | | 0.80 | 210.0 |
| 8 | | | | 2.10 | 208.8 |
| C | | | | 2.90 | 207.9 |
| 1/4 | | | | 1.80 | 209.0 |
| curb | | | | 2.50 | 208.3 |
| N. line | | | | 2.00 | 208.8 |

| Sta | + | - | H. I. | Rod. | Elev |
|---------|----------------------------------|------|--------|------|--------|
| | 7.74 | 2.63 | 215.93 | | 208.19 |
| | 100' East of 5 th St. | | | | |
| W. line | | | | 4.50 | 211.4 |
| curb | | | | 5.80 | 210.1 |
| 1/4 | | | | 6.20 | 209.7 |
| C | | | | 6.50 | 209.4 |
| 1/4 | | | | 6.10 | 209.8 |
| curb | | | | 5.20 | 210.7 |
| S. line | | | | 5.90 | 210.0 |
| | 125' East of 5 th St. | | | | |
| S. line | | | | 5.50 | 210.4 |
| curb | | | | 5.10 | 210.9 |
| 1/4 | | | | 4.60 | 211.3 |
| C | | | | 5.30 | 210.6 |
| 1/4 | | | | 5.0 | 210.9 |
| curb | | | | 4.60 | 211.3 |
| N. line | | | | 3.50 | 212.1 |

| | | Rod | Elev. |
|---------|--|------|-------|
| | 150' east of 5 th St. | | |
| W. line | | 3.70 | 212.2 |
| curb | | 4.60 | 211.3 |
| 1/4 | | 5.20 | 210.7 |
| C | | 5.40 | 210.5 |
| 1/4 | | 5.30 | 210.6 |
| curb | | 5.20 | 210.7 |
| S. line | | 5.80 | 210.1 |
| | 169.6' east of 5 th St. = West line of Park | | |
| S. line | | 7.00 | 208.9 |
| curb | | 6.10 | 209.8 |
| 1/4 | | 5.80 | 210.1 |
| C | | 5.70 | 210.2 |
| 1/4 | | 5.50 | 210.4 |
| curb | | 5.10 | 210.8 |
| N. line | | 4.70 | 211.2 |

Continued from page 70

73

| Sta. | + | 0 | - | Old | Eller |
|-----------|------|--------|-------|------|--------|
| 170 | | | | 9.6 | 314.0 |
| +50 | | | | 10.1 | 313.5 |
| 171 | | | | 10.4 | 313.2 |
| +50 | | | | 7.5 | 316.1 |
| Plug + 90 | | | | 4.84 | 318.76 |
| 172 | | | | 5.0 | 318.6 |
| +50 | | | | 4.6 | 319.0 |
| 173 | | | | 3.8 | 319.8 |
| +50 | | | | 2.5 | 321.1 |
| 174 | | | | 1.8 | 321.8 |
| +45 | | | | 0.9 | 322.7 |
| +50 | | | | 1.5 | 322.1 |
| 175 | | | | 11.3 | 312.3 |
| T.P. | 0.08 | 312.31 | 11.37 | | 312.23 |
| +50 | | | | 8.1 | 304.2 |
| T.P. | 0.82 | 301.22 | 11.91 | | 300.40 |
| 176 | | | | 3.2 | 298.0 |
| +50 | | | | 7.5 | 291.7 |
| 177 | | | | 10.9 | 290.3 |
| +50 | | | | 10.8 | 290.4 |
| T.P. | 0.54 | 289.90 | 11.86 | | 289.36 |
| | 1.14 | | 35.74 | | |

| Sta. | + | 0 | - | Pod | Elev. | Sta. | + | 0 | - | Pod | Elev. |
|-----------|------|--------|-------|------|--------|------|------|--------|-------|------|--------|
| 178 | | | | 1.8 | 288.1 | +50 | | | | 4.1 | 271.0 |
| +50 | | | | 5.1 | 284.8 | 188 | | | | 4.0 | 271.1 |
| 179 | | | | 7.9 | 282.0 | +50 | | | | 4.8 | 270.3 |
| +50 | | | | 9.6 | 280.3 | 189 | | | | 5.6 | 269.5 |
| 180 | | | | 11.5 | 278.4 | +50 | | | | 6.3 | 268.8 |
| T.P. | 1.42 | 279.84 | 11.48 | | 278.42 | 190 | | | | 7.2 | 267.9 |
| +50 | | | | 3.4 | 276.4 | +50 | | | | 8.3 | 266.8 |
| Plug + 95 | | | | 4.33 | 275.51 | 191 | | | | 10.0 | 265.1 |
| 181 | | | | 4.3 | 275.5 | +50 | | | | 11.7 | 263.4 |
| +50 | | | | 6.6 | 273.2 | T.P. | 0.95 | 264.23 | 11.84 | | 263.28 |
| 182 | | | | 8.0 | 271.8 | 192 | | | | 2.8 | 261.4 |
| +50 | | | | 8.5 | 271.3 | +50 | | | | 4.0 | 260.2 |
| 183 | | | | 7.9 | 271.9 | 193 | | | | 4.3 | 259.9 |
| +50 | | | | 5.8 | 274.0 | +35 | | | | 5.3 | 258.9 |
| 184 | | | | 6.1 | 273.7 | +50 | | | | 5.8 | 258.4 |
| +50 | | | | 6.2 | 273.6 | 194 | | | | 7.9 | 256.3 |
| 185 | | | | 7.0 | 272.8 | +50 | | | | 10.1 | 254.1 |
| Plug + 45 | 2.59 | 275.12 | 7.31 | | 272.53 | 195 | | | | 10.6 | 253.6 |
| 186 | | | | 2.2 | 272.9 | +50 | | | | 12.4 | 251.8 |
| +50 | | | | 2.4 | 272.7 | T.P. | 1.51 | 254.37 | 11.37 | | 252.86 |
| 187 | | | | 3.2 | 271.9 | 196 | | | | 2.9 | 251.5 |
| | 4.01 | | 18.79 | | | | 2.46 | | 23.21 | | |

| Sta. | + | 0 | - | Pod | Elev. | Sta. | + | 0 | - | Pod | Elev. |
|------------|------|--------|-------|------|--------|-----------|------|--------|-------|------|--------|
| +50 | | | | 2.5 | 251.9 | 203 | | | | 7.6 | 235.3 |
| 197 | | | | 3.6 | 250.8 | +50 | | | | 6.4 | 236.5 |
| Plug + 400 | | | | 5.17 | 250.80 | 204 | | | | 8.4 | 234.5 |
| +50 | | | | 4.5 | 249.9 | +24 | | | | 9.7 | 233.2 |
| 198 | | | | 5.2 | 249.2 | +50 | | | | 9.9 | 233.0 |
| T.P. | 0.63 | 249.10 | 5.90 | | 248.47 | T.P. | 0.33 | 231.37 | 11.88 | | 231.04 |
| +520 | | | | 3.5 | 245.6 | 205 | | | | 0.8 | 230.6 |
| 199 | | | | 9.3 | 239.8 | +15 | | | | 2.8 | 228.6 |
| T.P. | 0.20 | 237.51 | 11.79 | | 237.31 | +50 | | | | 12.2 | 219.2 |
| +13 | | | | 0.5 | 237.0 | T.P. | 4.02 | 225.16 | 10.23 | | 221.14 |
| +50 | | | | 14.5 | 223.0 | +73 | | | | 12.7 | 212.3 |
| +60 | | | | 17.6 | 219.9 | 206 | | | | 4.3 | 220.9 |
| +93 | | | | 1.8 | 235.7 | T.P. | 3.61 | 227.43 | 1.34 | | 223.82 |
| 200 | | | | 0.6 | 236.9 | +50 | | | | 1.4 | 226.0 |
| T.P. | 6.04 | 242.92 | 0.63 | | 236.88 | Plug + 82 | | | | 1.99 | 225.44 |
| +50 | | | | 2.2 | 240.7 | 207 | | | | 3.8 | 223.6 |
| 201 | | | | 1.0 | 241.9 | +50 | | | | 0.8 | 226.6 |
| +50 | | | | 1.7 | 241.2 | 208 | | | | 1.5 | 225.9 |
| 202 | | | | 4.4 | 238.5 | +50 | | | | 4.7 | 222.7 |
| Plug + 25 | | | | 6.23 | 236.69 | +90 | | | | 7.77 | 219.66 |
| +50 | | | | 7.7 | 235.2 | 209 | | | | 10.7 | 216.7 |
| | 6.87 | | 18.32 | | | | 7.96 | | 23.45 | | |

| Sta. | + | 0 | - | Pod | Elev. | Sta. | + | 0 | - | Pod | Elev. |
|----------|------|--------|-------|------|--------|----------|------|--------|-------|------|--------|
| T.P. | 0.17 | 215.63 | 11.97 | | 215.46 | 215. | | | | 5.6 | 185.8 |
| +22 | | | | 4.2 | 211.4 | +50 | | | | 8.0 | 183.4 |
| T.P. | 1.54 | 209.08 | 8.09 | | 207.54 | T.P. | 0.64 | 180.19 | 11.86 | | 179.55 |
| +45 | | | | 15.7 | 193.4 | 216 | | | | 5.3 | 174.9 |
| +61 | | | | 1.3 | 207.8 | +25 | | | | 7.1 | 173.1 |
| T.P. | 4.40 | 213.48 | 0.00 | | 209.08 | +50 | | | | 5.5 | 174.7 |
| Plug +75 | | | | 0.29 | 213.19 | +70 | | | | 3.5 | 176.7 |
| 210 | | | | 0.6 | 212.9 | 217 | | | | 3.9 | 176.3 |
| +50 | | | | 3.1 | 210.4 | +50 | | | | 5.9 | 174.3 |
| 211 | | | | 6.8 | 206.7 | 18 Plug | | | | 7.50 | 172.7 |
| Plug +53 | 1.22 | 202.68 | 12.02 | | 201.46 | +50 | | | | 11.6 | 168.6 |
| 212 | | | | 2.2 | 200.5 | T.P. | 0.24 | 169.25 | 11.18 | | 169.01 |
| +50 | | | | 4.2 | 198.5 | 219 | | | | 2.9 | 166.4 |
| +70 | | | | 5.1 | 197.6 | +50 | | | | 5.9 | 163.4 |
| 213 | | | | 5.4 | 197.2 | 220 | | | | 8.6 | 160.7 |
| +50 | | | | 7.9 | 194.8 | Plug +17 | | | | 7.81 | 159.44 |
| Plug +75 | | | | 9.70 | 192.98 | +58 | | | | 10.5 | 158.8 |
| 214 | | | | 10.8 | 191.9 | T.P. | 0.77 | 158.52 | 11.50 | | 157.75 |
| +50 | | | | 10.6 | 192.1 | 221 | | | | 3.0 | 155.5 |
| T.P. | 0.68 | 191.41 | 11.95 | | 190.73 | +50 | | | | 6.0 | 152.5 |
| | | | | | | 222 | | | | 8.0 | 150.5 |
| | 8.01 | | 44.03 | | | | 1.65 | | 34.54 | | |

| Sta. | + | 0 | - | Pod | Elw | Sta. | + | 0 | - | Pod | Elw |
|---------|------|--------|-------|------|--------|------|------|--------|-------|------|--------|
| +50 | | | | 9.9 | 148.6 | 229 | | | | 8.7 | 116.9 |
| Plug+72 | 0.66 | 148.27 | 10.91 | | 147.61 | +50 | | | | 9.5 | 116.1 |
| 223 | | | | 11.9 | 146.4 | T.P. | 0.43 | 114.74 | 11.50 | | 114.31 |
| +50 | | | | 4.6 | 143.7 | 230 | | | | 2.0 | 112.7 |
| 224 | | | | 6.4 | 141.9 | +50 | | | | 4.4 | 110.3 |
| +50 | | | | 9.2 | 139.1 | +91 | | | | 7.6 | 107.1 |
| 225 | | | | 12.1 | 136.2 | 231 | | | | 8.2 | 106.5 |
| T.P. | 0.58 | 137.00 | 11.85 | | 136.42 | +50 | | | | 11.5 | 103.2 |
| +39 | | | | 3.9 | 133.1 | T.P. | 0.74 | 103.63 | 11.85 | | 102.89 |
| +50 | | | | 3.9 | 133.1 | 232 | | | | 2.8 | 100.8 |
| 226 | | | | 5.2 | 131.8 | +50 | | | | 5.9 | 97.7 |
| +50 | | | | 6.0 | 131.0 | 233 | | | | 8.8 | 94.8 |
| 227 | | | | 7.1 | 129.9 | +50 | | | | 11.3 | 92.3 |
| +50 | | | | 9.7 | 127.3 | T.P. | 1.54 | 93.33 | 11.84 | | 91.79 |
| T.P. | 0.29 | 125.61 | 11.68 | | 125.32 | 234 | | | | 3.0 | 90.3 |
| 228 | | | | 1.7 | 123.9 | +50 | | | | 4.2 | 89.1 |
| Plug+31 | | | | 3.66 | 121.95 | 235 | | | | 5.5 | 87.8 |
| +50 | | | | 8.6 | 117.0 | +50 | | | | 7.0 | 86.3 |
| +64 | | | | 9.4 | 116.2 | 236 | | | | 8.1 | 85.2 |
| +79 | | | | 14.3 | 111.3 | +50 | | | | 8.2 | 85.1 |
| +74 | | | | 9.2 | 116.4 | 237 | | | | 6.8 | 86.5 |
| | 1.53 | | 34.44 | | | | 2.71 | | 34.09 | | |

| Sta. | + | 0 | - | Dist | Elev. |
|------|---|---|------|-------|-------|
| +51 | | | | 6.8 | 86.5 |
| B.M. | | | 5.73 | 87.60 | ✓ |

Top of 4" x 4" Post

County Poor House
Wagon Road. Hutchison

Jan. 26. 04.

45-40
32-35
11 17 1/2

79

| Sta. | + | 0 | - | Pod | Elv. |
|---------------------|---------------|--------|-------|------|------------|
| See Page 42. - Page | | | | | |
| 26+00 | P.O.T. | = | 26+00 | P.C. | 45° 10' L |
| | | | | | Δ = 48° 00 |
| 27+06.2 | P.R.C. | | | | 45° 10' |
| | | | | | Δ = 48° 00 |
| 28+12.4 | P.T. | | | | |
| 29+12.4 | Property Line | | | | |
| | 9.02 | 300.67 | | | 291.65 |
| 22+46.7 | | | 86 | | 292.1 |
| +80 | | | | | |
| 23 | | | 69 | | 293.8 |
| +25 | | | 55 | | 294.9 |
| +50 | | | 55 | | 295.2 |
| +75 | | | 41 | | 296.6 |
| 24 | | | 48 | | 295.9 |
| +25 | | | 56 | | 295.1 |
| +50 | | | 51 | | 295.6 |
| +75 | | | 66 | | 296.1 |
| 25 | | | 79 | | 297.8 |
| +25 | | | 93 | | 299.0 |

| | 30067 | | |
|---------|-------|-------|------------------|
| +50 | | 11.3 | 289.4 |
| +75 | | 11.9 | 288.8 |
| 26. | | 11.4 | 289.3 |
| 6.46 | 95.61 | 11.52 | 289.15 Hutchison |
| +25 | | 7.6 | 289.0 |
| +50 | | 7.5 | 288.1 |
| +75 | | 6.1 | 289.5 |
| 27 | | 7.3 | 288.3 |
| +25 | | 7.0 | 288.6 |
| +50 | | 6.8 | 288.8 |
| +75 | | 6.4 | 289.2 |
| 28. | | 5.0 | 290.6 |
| +15 | | 4.0 | 291.6 |
| +50 | | 3.8 | 291.8 |
| 29+12.4 | | 1.6 | 294.0 |

sta

Fin) drain down 4th

" " 3d,

on East side -

W. side 3d, turn in W. side

of Fin,

East side 2d, drain down 3d,

W. " turn in W. side of Fin,

1st, same as 2d + 3d,

at front drain same as 2d, 3-st
if opposite of mt camp drainage
across front.

at abbatino drain W. side

or across Fin.

Turn W. side at W. side of Fin West
and carry it across - Union!

Camp Drainage across State on both sides

" Drainage across - Columbia.

B.M. 287.71

196.75

10.51

207.26

2.92

204.34

6.48

210.82

2.63

208.19

7.74

215.93

450.8

121
 Return to City Engineers Office
 City Hall, San Diego, Cal.

11.98
 Mr. Cook
 N. E. corner and 2nd
 125 x 100
 10000
 193.12
 116.99
 26.28
 8658.7
 1127.9
 2.7
 422
 155
 18
 589050.1
 990046
 18036
 180036
 185445
 180055
 456
 184014
 9421
 183572
 2628
 1303

Return to City Engineers Office
 City Hall, San Diego, Cal.

Return to City Engineers Office
 Table showing the difference of latitude and departure in
 running 80 chains at any course from 1 to 60 minutes.

| MINUTES | LKS. | MINUTES | LKS. | MINUTES | LKS. |
|---------|--------|---------|--------|---------|---------|
| 1 | 2 1/3 | 21 | 49 | 41 | 95 2/3 |
| 2 | 4 2/3 | 22 | 51 1/3 | 42 | 98 |
| 3 | 7 | 23 | 53 2/3 | 43 | 100 1/3 |
| 4 | 9 1/3 | 24 | 56 | 44 | 102 2/3 |
| 5 | 11 2/3 | 25 | 58 1/3 | 45 | 105 |
| 6 | 14 | 26 | 60 2/3 | 46 | 107 1/3 |
| 7 | 16 1/3 | 27 | 63 | 47 | 109 2/3 |
| 8 | 18 2/3 | 28 | 65 1/3 | 48 | 112 |
| 9 | 21 | 29 | 67 2/3 | 49 | 114 1/3 |
| 10 | 23 1/3 | 30 | 70 | 50 | 116 2/3 |
| 11 | 25 2/3 | 31 | 72 1/3 | 51 | 119 |
| 12 | 28 | 32 | 74 2/3 | 52 | 121 1/3 |
| 13 | 30 1/3 | 33 | 77 | 53 | 123 2/3 |
| 14 | 32 2/3 | 34 | 79 1/3 | 54 | 126 |
| 15 | 35 | 35 | 81 2/3 | 55 | 128 1/3 |
| 16 | 37 1/3 | 36 | 84 | 56 | 130 2/3 |
| 17 | 39 2/3 | 37 | 86 1/3 | 57 | 133 |
| 18 | 42 | 38 | 88 2/3 | 58 | 135 1/3 |
| 19 | 44 1/3 | 39 | 91 | 59 | 137 2/3 |
| 20 | 46 2/3 | 40 | 93 1/3 | 60 | 140 |

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

| Angle | COR. IN LINKS |
|-------|---------------|-------|---------------|-------|---------------|-------|---------------|
| 0 | | 0 | | 0 | | 0 | |
| 4 | 0.24 | 11 | 1.88 | 18 | 5.14 | 25 | 10.54 |
| 5 | 0.38 | 12 | 2.24 | 19 | 5.76 | 26 | 11.26 |
| 6 | 0.55 | 13 | 2.63 | 20 | 6.42 | 27 | 12.24 |
| 7 | 0.76 | 14 | 3.06 | 21 | 7.11 | 28 | 13.37 |
| 8 | 0.98 | 15 | 3.53 | 22 | 7.85 | 29 | 14.34 |
| 9 | 1.24 | 16 | 4.02 | 23 | 8.64 | 30 | 15.47 |
| 10 | 1.55 | 17 | 4.56 | 24 | 9.47 | 35 | 22.07 |